ENSR International
Redmond, Washington

Soil Boring Report

Former Unocal Bulk Plant #0082
Chelan, Washington

ENSR Corporation
March 2005
Document Number 06940248-2

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Former Unocal Bulk Plant #0082
Chelan, Washington

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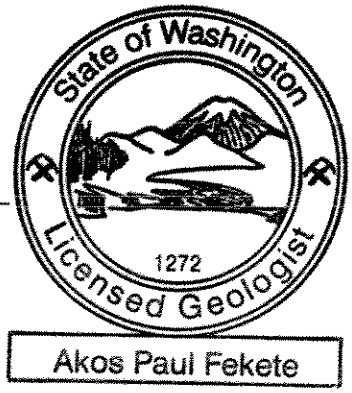

ENSR Corporation
March 2005
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1.0 INTRODUCTION

This report presents the results of soil borings drilled at the site of the former Unocal Bulk Storage Plant #0082 in Chelan, Washington (Figure 1). It is an addendum to the Residual Soil Excavation Plan written in December 2004, which serves as a corrective action plan for achieving environmental closure at this site.

1.1 Purpose

The purpose of these borings was to more clearly define the lateral extents and vertical depth of contaminated soils. This information will be used to determine the location and amount of contaminated soils that will be removed during.

This work effort was intended to address some of the concerns identified by the Washington State Department of Ecology (DOE) concerning petroleum impacted soils remaining on the site (October 24, 2002 letter from DOE to Unocal, Mark Brearley). In response to past site assessment work at this site, and a request for a "No Further Action" letter, DOE listed four objectives that need to be met in order for this site to obtain closure. These four objectives are:

1 Address residual soil contamination at the site.

2 Provide additional information regarding Excavations 1,2, and 3.

3 Collect four consecutive quarters of ground water samples with contaminant levels below MTCA Method A levels.

4 Fully characterize the soil at the site, in particular, in the following areas:

Beneath the former truck unloaders (NE of TP-6)
Beneath the former oil/water separator
Beneath the fill drain ports of the former ASTs
Beneath the former catch basin
Beneath the joints/elbows of above and below ground product lines

This soil boring work effort will address as many of these issues as possible. The others will be covered during the excavation work planned for next month, and during quarterly ground water monitoring.

1.2 Site History

From approximately 1927 until 1989 this site was used as a bulk plant for the storage and distribution of petroleum fuel. In 1989, the bulk plant was permanently closed, and by 1992, all tanks (both above ground and underground) and structures had been demolished and removed.

Initial surface and subsurface assessments began in 1989, and continued through 2001. In 2001, 300 cubic yards of impacted soil were removed from six excavation pits.

Ground water monitoring occurred from 1991 to 1999 on a quarterly to semi-annual basis. By 2001, there were a total of eight monitoring wells on-site. From 2001 to 2002, quarterly groundwater samples were taken from all monitoring wells on the site. In 2001 an air sparge and soil vapor extraction (AS/SVE) system was installed to remediate impacted soil and groundwater. The system was deactivated in 2002.

In 2002 a request for no further action (NFA) was submitted. However, DOE determined that more information was needed with respect to possible remaining soil contamination.

During 2003 and 2004 quarterly groundwater sampling showed the presence of TPH-diesel (TPH-D) in two of eight monitoring wells (MW-1 and MW-5), which exceed MTCA Method A Cleanup Levels. A review of historical soil sampling and analysis data confirmed that contaminated soils had been left in place in the areas immediately surrounding those wells. It was determined that as long as those impacted soils remained in place the wells would be very slow to remediate.

2.0 PROCEDURES

2.1 Soil Sampling Strategy

A hollow stem auger drilling rig was used to drill the borings at selected locations on site. Figure 2 shows the locations of the eight borings. Each auger was advanced to the depth where ground water was encountered. Split spoon soil samples were removed from the borings at 5' depth increments. The spoon was cleaned using soap and water between each sample event.

In each boring, samples were collected every 5 feet of depth, starting at the 5 foot below ground surface (bgs) level. The sampling procedure, established prior to initiating drilling activities, was to field screen each sample using a PID detector. Samples at the 5 foot and 10 foot bgs levels that gave a positive indication on the PID were placed in jars and sent to the laboratory for analysis. All samples from the 15 foot, 20 foot, and 25 foot bgs levels were placed in jars and sent to the laboratory for analysis.

2.2 Analytics

Selected soil samples collected from the soil borings were submitted to North Creek Analytical (NCA) laboratories in Bothell, Washington under chain-of-custody (COC) protocol. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by NWTPH-Gx and total petroleum hydrocarbons as diesel and heavy oils (TPH-d and TPH-o) by Method NWTPH-Dx with acid/silica gel cleanup. In addition the samples will also be analyzed for benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8021B.

3.0 RESULTS

Table 1 summarizes the samples where MTCA Method A soil Cleanup Levels were exceeded. The complete analytical results are given in Table 2.

The following borings were below reporting limits for all analytes: B-1, B-3, B-4, B-7, and B-8. Boring B-2 had reportable concentrations of gasoline, diesel and oil. However, this well was significantly below Model Toxics Control Act (MTCA) Method A cleanup levels [100 milligrams per kilogram (mg/kg), 2,000 mg/kg, and 2,000 mg/kg, respectively].

Only borings B-5 (located near MW-5), and B-6 (located just south of MW-1) encountered significant quantities of petroleum hydrocarbons (see Table 1 below). In boring B-5, gasoline and diesel concentrations exceeded MTCA Method A Cleanup Levels from the 10 foot level bgs down to 25 feet. The highest concentrations were at the 20 foot level. At the 10 foot level (the first sample analyzed), concentrations were significantly above MTCA Method A cleanup levels. At the 25 foot level, concentrations appear to be decreasing, but are not below MTCA.

In boring B-6, gasoline and diesel are above MTCA Method A levels. As with B-5, the highest concentrations are at the 20 fool level. The deepest sample (from 25 feet bgs) is below MTCA Method A levels.

Table 1
Soil Boring – Summary of Exceedences

Well Number (Depth)		TPH-G	TPH-D
MTCA Method A	mg/kg	100	2,000
B5(10-11.5)		281	3,080
B5(15-16.5)		1,070	2,870
B5(20.21.5)		1,140	4,690
B5(25-26.5)		373	2,260
B6(15-16.5)		242	1,800
B6(20-21.5)		378	7,370
B6(25-26.5)		30.8	86.7

4.0 DISCUSSION

Figure 3 provides a site plan showing the location of all of the assessment work that has been done to date. At each location, where chemical analysis has been performed, the results are listed. Where an analysis yielded concentrations above method reporting limits, the depth of the analysis is given and then the concentration. All concentrations are for TPH-Diesel unless otherwise noted. ND means that all samples at the location were below reporting limits. TPH means that Method 418.1 was used as a broad indicator of the presence of petroleum hydrocarbons.

Figure 1 also indicates the possible area of soils that are impacted at the 20 foot bgs level. Straight lines indicate a higher level of certainty as to the location of the line. Wavy lines may be only approximate.

4.1 DOE Concerns

As mentioned in Section 1.1, DOE has some specific issues at this site that need to be addressed prior achieving closure. The following discussion addresses as many of these issues as the information currently available allows. Unresolved issues will be covered during the excavation phase of work.

1 Address residual soil contamination at the site.

Historical site assessment work, and the associated sampling and analytical data, indicate that there are contaminated soils left in place. Particular areas of concern are the location of wells MW-1 and MW-5. These wells both encountered contaminated soils during drilling operations. This conclusion is supported by the persistent nature of contaminated ground water found in these two wells each quarter. Residual soil contamination is present following excavation operations (Excavation #1).

Excavations 3 and 5 may have impacted soils remaining in place. Repeatedly throughout the history of environmental assessment work at this site, the lack of conformational sampling left doubt as to whether all contaminated soils had been removed. Also, test pits and excavations frequently did not extend deep enough to confirm the vertical extents of contamination.

In Excavation 5, test pit TP-9 encountered contaminated soils at a depth of 10', which were never completely removed and investigation of the vertical extent of those contaminated soils was never conducted. During the current boring operations B-7 was advanced as close to TP-9 as possible. B-7 encountered no soils impacted above analytical reporting levels.

Excavation 3 will be investigated in detail during the excavation operations to be conducted in April.

2 Provide additional information regarding Excavations 1,2, and 3.

In Excavation #1, borings B-6 and B-5 confirmed the contamination believed to still exist in the areas of wells MW-1 and MW-5, respectively. Borings B-4 and B-8, combined with well MW-4, define the lateral extents of this contamination on the east side of the plume.

In Excavation #2, although MW-3 and geoprobe GP-4 were clean, contaminated soils were found in test pit TP-2 (1989) at a depth of 11 feet. A vertical extent to the contamination was never determined in TP-2 Boring B-3 was located near the center of this test pit area and advanced down to the water level. Boring B-3 was below analytical reporting limits for all analytes at all depths.

Due to the greater area of Excavation #3 and its associated piping issues, this area was not addressed in this work effort. It will be investigated during the April excavation work.

3 Collect four consecutive quarters of ground water samples with contaminant levels below MTCA Method A levels.

Groundwater monitoring will be initiated following the remedial excavation activities scheduled for April 2005. It is anticipated that MW-1 and MW-5 will be destroyed during these activities. They will be replaced in May 2005.

4 Fully characterize the soil at the site, in particular, in the following areas:

Beneath the former truck unloaders (NE of TP-6)

Boring B-6 was located near the truck unloaders. B-6 was heavily contaminated and will be addressed during excavation.

Beneath the former oil/water separator

Boring B-1 was located as close to the oil/water separator as possible. It was below analytical recording levels for all analytes.

Beneath the fill drain ports of the former ASTs

Boring B-7 was located near the above ground storage tanks. It was below analytical recording levels for all analytes.

Beneath the former catch basin

Boring B-2 was located near the catch basin. This boring had some detectable concentrations of gasoline, diesel and oil, but was far below MTCA Method A cleanup levels.

Beneath the joints/elbows of above and below ground product lines.

The joints and elbows associated with product pipe lines in the area of Excavation #3 were not address during the boring work due to the large area that they cover. They will be addressed during the excavation phase of work through use of trenches and test pits.

4.2 Recommended Actions

4.2.1 Excavation #1

Removal of soils in the area of B-5 may be required from above the 10 foot level to below 25 feet. The soil sampling results from well MW-5 are consistent with this, and suggest that the contaminated soils may not extend deeper than 29 feet.

Soils in the area of B-6 may require removal from above 15' to between 20 and 25 feet bgs based on the soil sampling results from well MW-1.

This soil boring effort has refined the lateral extent of residual soil contamination. Additional refinement will occur during the excavation process and confirmed through field and laboratory analysis.

4.2.2 Excavation #2

The absence of contamination in boring B-3 confirms that contaminated soils do not extend to the water table. Confirmation samples from this excavation area indicates that the soils comply with MTCA Method A Cleanup Levels for soils.

4.2.3 Excavation #3

Additional investigation should be performed in this area of the site during excavation operations in April. In particular:

TP-1(89) TPH of 1900 ppm at 11'

Investigation of the pipeline area to confirm absence of leaked hydrocarbons through test pits.

Confirmation of the vertical extents of contamination by sampling at 13 feet bgs.

4.2.4 Excavation #5

The absence of contamination in boring B-7 confirms that contaminated soils do not extend to the ground water. This excavation area appears to meet MTCA Method A Cleanup Levels for soils.

4.2.5 Excavations #4 and #6

Based on confirmatory soil samples and previous test data, soils in these areas are below MTCA Method A cleanup levels and require no additional remedial action.

5.0 SUMMARY

Residual soil contamination remains in place in the area of wells MW-1 and MW-5 as shown in Figure 3. The highest concentrations appear to be at a depth of 20 feet bgs, but may range from 10 feet bgs to 25 feet bgs in some areas.

Figure 3 shows a target area in the eastern portion of the site. Also shown in Figure 3 are soil concentrations and depths for the various sampling points throughout the site. Concentrations are for TPH-Diesel, unless stated otherwise. This target area represents the estimated horizontal extents of contamination at the 20 foot bgs level. The area within this target zone is approximately 1100 square feet (120 square yards). Within this target area, soils with petroleum hydrocarbons exceeding MTCA Method A Cleanup Levels may extend down, on average, to a depth of 23 feet bgs. They may also extend up to approximately 14 feet. This gives an estimated volume of approximately 360 cubic yards.

The area of Excavation #3 still requires investigation.

Remaining areas of the site appear to be in compliance with MTCA regulations.

Table 1
Soil Boring Sample Analytical Results
Former Unocal Bulk Fuel Terminal #0082
Chelan, Washington

Boring # (Depth)	Benzene[a]	Toluene[a]	Ethyl-Benzene[a]	Total Xylenes[a]	TPH-G[b]	TPH-D[c]	TPH-O[c]
MTCA Method A mg/l	*0.03*	*7*	*6*	*9*	*100/30*	*2,000*	*2,000*
B1(3.5-4)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(8.5-9)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(13.5-14)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(18.5-20)	<0.0235	<0.0391	<0.0391	<0.0782	<3.91	<10.0	<25.0
B2(5-6.5)	<0.03	<0.05	<0.05	<0.10	**8.19**	**35.3**	**28.5**
B2(15-16.5)	<0.0427	<0.0712	<0.0712	<0.142	<7.12	**11.3**	<25.0
B2(20-21.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B2(25-26.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B3(15-16.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B3(20-21.5)	<0.0271	<0.0452	<0.0452	<0.0905	<4.52	<10.0	<25.0
B3(25-26.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B4(15-16.5)	<0.0269	<0.0448	<0.0448	<0.0897	<4.48	<10.0	<25.0
B4(20-21.5)	<0.0269	<0.0448	<0.0448	<0.0896	<4.48	<10.0	<25.0
B4(25-26.5)	<0.0248	<0.0413	<0.0413	<0.0826	<4.13	<10.0	<25.0
B5(10-11.5)	<0.03	<0.05	<0.05	**0.188**	**281**	**3,080**	**60.1**
B5(15-16.5)	<0.0250	<0.0416	**0.167**	**0.600**	**1,070**	**2,870**	**75.4**
B5(20-21.5)	<0.0247	<0.0412	**0.268**	**0.983**	**1,140**	**4,690**	**104**
B5(25-26.5)	<0.030	<0.050	**0.0769**	**0.143**	**373**	**2,260**	<125
B6(15-16.5)	<0.0267	<0.0444	<0.0444	<0.0889	**242**	**1,800**	<25.0
B6(20-21.5)	<0.0245	<0.0408	<0.0408	<0.0816	**378**	**7,370**	**58.6**
B6(25-26.5)	<0.0260	<0.0434	<0.0434	<0.0868	**30.8**	**86.7**	<25.0
B7(15-16.5)	<0.0300	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B7(20-21.5)	<0.0300	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B7(25-26.5)	<0.0249	<0.0415	<0.0415	<0.0828	<4.15	<10.0	<25.0
B8(15-16.5)	<0.0266	<0.0444	<0.0444	<0.0887	<4.44	<10.0	<25.0
B8(20-21.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B8(25-26.5)	<0.0273	<0.0455	<0.0455	<0.0909	<4.55	<10.0	<25.0

NOTES:

[a] Analyzed by EPA Method 8021B.

[b] Gasoline range hydrcarbons analyzed by Ecology Northwest Method NWTPH-G.

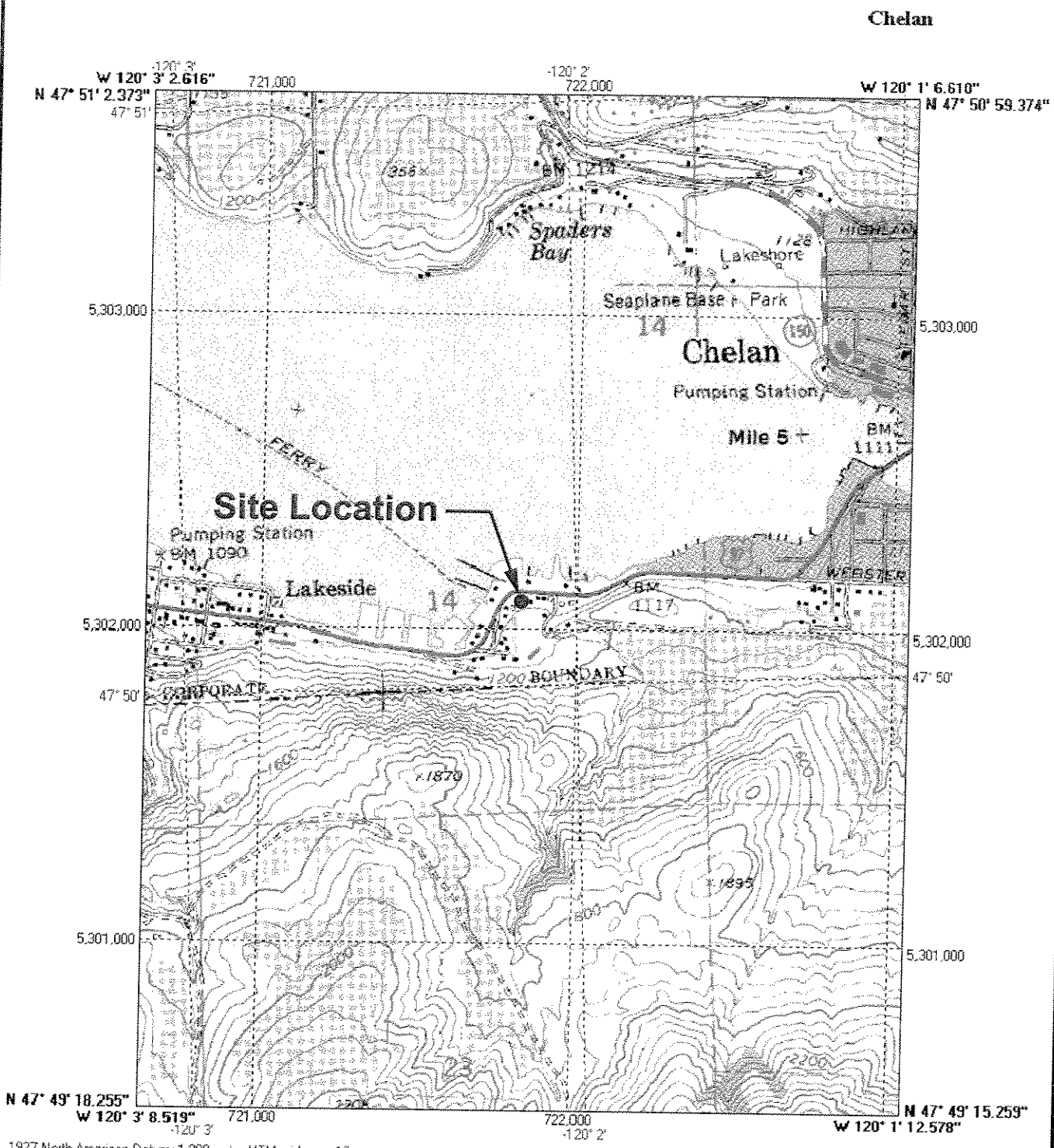
[c] Diesel and oil range hydrcarbons analyzed by Ecology Northwest Method NWTPH-Dx.

MTCA Model Toxics Control Act

Bold analytical concentrations indicates a concentration greater than analytical reporting limits.

Gray shading represents concentrations greater than MTCA Method A levels for soil

All concentrations in mg/kg



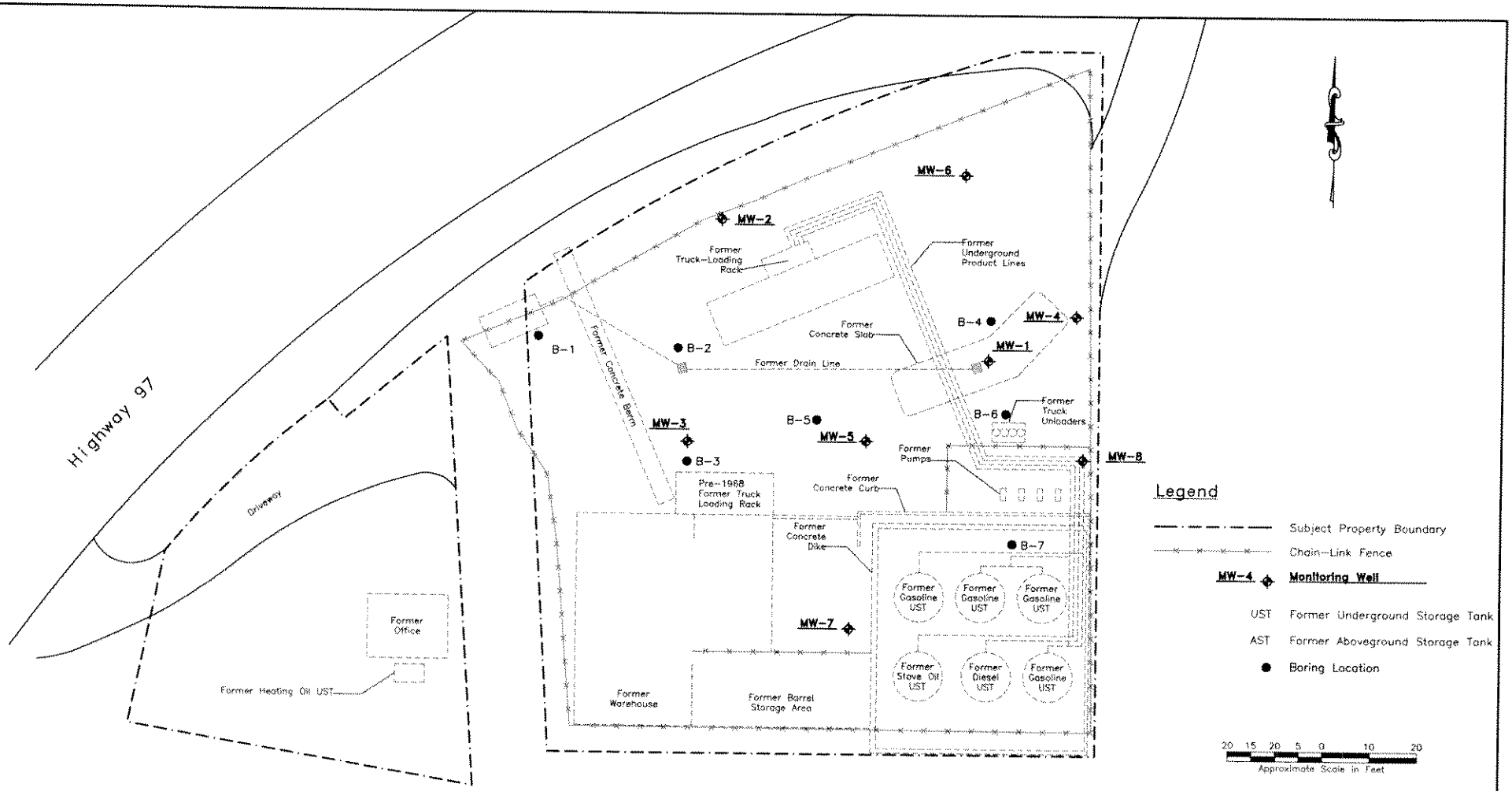
DRAWN:	K. Mongar
CHECKED:	A. Fekete
DATE:	November 10, 2004
FILENAME:	0694024813A
PROJECT NO:	06940-248-130

ENSR INTERNATIONAL

FIGURE 1

SITE LOCATION

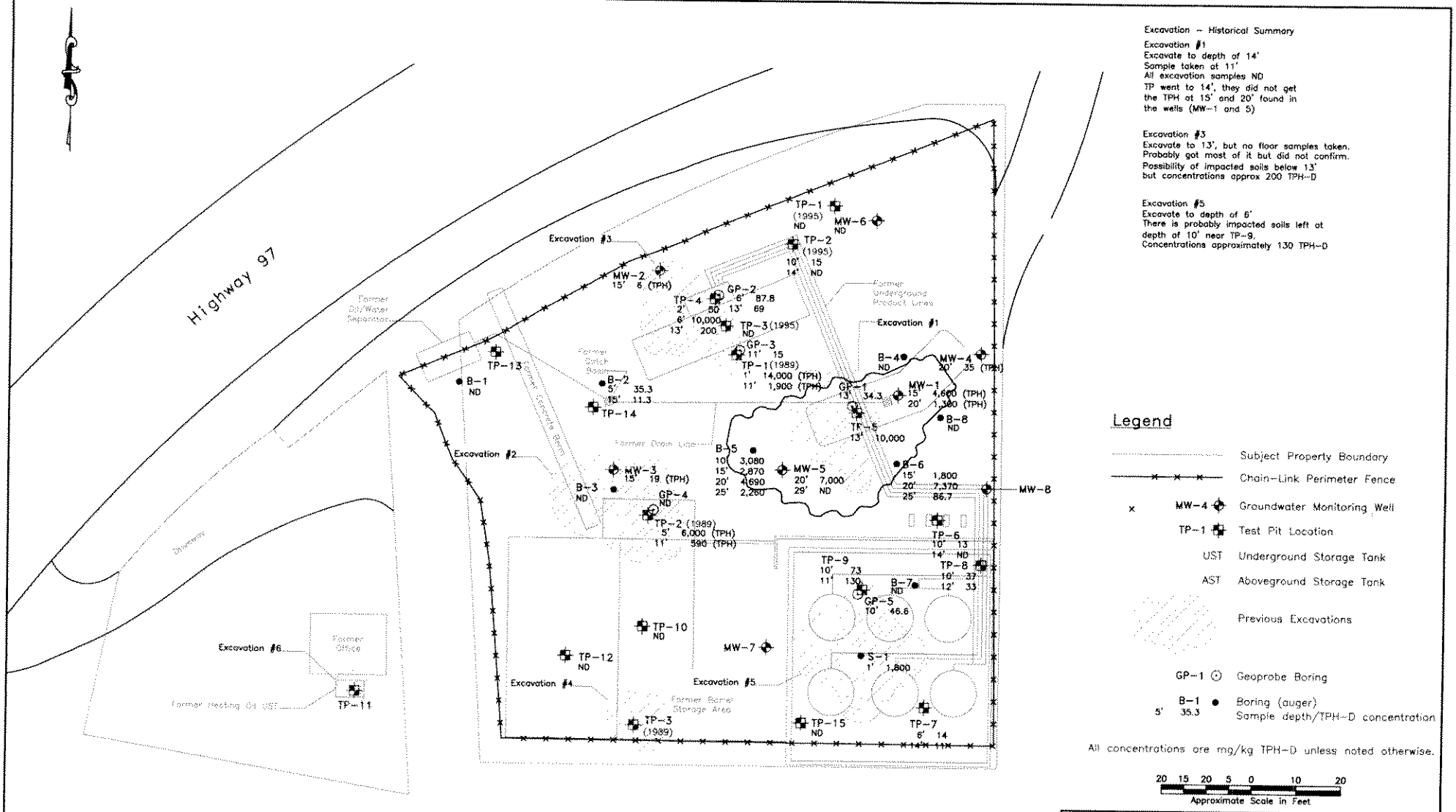
Former Unocal Bulk Plant No. 0082
Highway 97 at East Street
Chelan, Washington



Source: GeoEngineers, AutoCAD File No. 004-02.dwg, 02/21/02

SCALE: 1" = 20' @11x17	DESIGN: jborthen	CHECKED: A. Fekete	ENSR PROJECT NO:	ENSR INTERNATIONAL
FILENAME: 06940248138 jb	DRAWN: jborthen	DATE: May 25, 2004	06940-248-130	

FIGURE 2
SOIL BORING LOCATIONS
Former Unocal Bulk Plant No. 0082
Highway 97 at East Street
Chelan, Washington



Excavation – Historical Summary

Excavation #1
Excavate to depth of 14'
Sample taken at 11'
All excavation samples ND
TP went to 14', they did not get the TPH at 15' and 20' found in the wells (MW-1 and 5)

Excavation #3
Excavate to 13', but no floor samples taken.
Probably got most of it but did not confirm.
Possibility of impacted soils below 13' but concentrations approx 200 TPH-D

Excavation #5
Excavate to depth of 6'
There is probably impacted soils left at depth of 10' near TP-9.
Concentrations approximately 130 TPH-D

Legend

- Subject Property Boundary
- Chain-Link Perimeter Fence
- MW-4 — Groundwater Monitoring Well
- TP-1 — Test Pit Location
- UST — Underground Storage Tank
- AST — Aboveground Storage Tank
- Previous Excavations
- GP-1 — Geoprobe Boring
- B-1 — Boring (auger); 5' 35.3 — Sample depth/TPH-D concentration

All concentrations are mg/kg TPH-D unless noted otherwise.

20 15 20 5 0 10 20
Approximate Scale in Feet

Source: GeoEngineers, AutoCAD drawing 004-02.dwg, 02/21/02 and Maul, Foster, and Alongi, AutoCAD drawing 009-02.dwg, 01/27/02

SCALE: 1" = 20' @11x17	DESIGN: J. Barthen	CHECKED: A. Fekete	ENSR PROJECT NO:
FILENAME: 0694024813F	DRAWN: J. Barthen	DATE: March 2005	06940-248-130

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FIGURE 3
SITE CONTAMINATION PROFILE
Former Unocal Bulk Plant No. 0082
Highway 97 at East Street
Chelan, Washington

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-1
Sheet: 1 of 1
Surface Elevation (ft-asl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

BoringData

Boring Depth: 20ft
Water Depth: 18ft

Project Manager: Jim Borthen
Drilling Contracto Cascade Drilling
Field Technicia Bratz 2/15/2005
Driller: 2/15/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description	Fill Mat.	Tube	Fill Mat.	Depth
1										Native Backfill				1
2										Bentonite seal				2
3														3
4	3.5-5ft	B-1 (3.5-4)	38	50			60	0.0	Poorly Sorted Fine-Course Brown Dry Sand, Pebble Inclusions No Odor					4
5														5
6														6
7														7
8	8.5-10ft	B-1 (8.5-9)	26	32	50		50	0.0	Poorly Sorted Fine-Course Brown Dry Sand, 30% Pebbles No Odor					8
9														9
10														10
11														11
12														12
13	13.5-15ft	B-1 (13.5-14)	11	11	11		50	0.0	Poorly Sorted Fine-Course Brown Damp Sand, 30% Pebbles No Odor					13
14														14
15														15
16														16
17														17
18	18.5-20ft	B-1 (18.5-20)	12	15	16		100	0.0	▼ Well-Sorted Medium/Course Wet Sand No Odor					18
19														19
20														20
21														21
22														22
23														23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36									F: Fine; M: Medium; C: Coarse					36

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-2
Sheet: 1 of 1
Surface Elevation (ft-asl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

BoringData

Boring Depth: 25ft
Water Depth: 20ft

Project Manager: Jim Borthen
Drilling Contracto Cascade Drilling

ENSR Bratz 2/15/2005
Driller: 2/15/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description	Fill Mat.	Tube	Fill Mat.	Depth
1										Native Backfill				1
2										Bentonite seal				2
3														3
4														4
5	5-6.5	B-2 (5-6.5)	15	15	15		75	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor					5
6														6
7														7
8														8
9														9
10	10-11.5	B-2 (10-11.5)	36	50			50	0.6	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor					10'
11														11'
12														12'
13														13'
14														14'
15	15-16.5	B-2 (15-16.5)	20	30	42		80	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 30% Pebbles No Odor					15'
16														16'
17														17
18														18
19														19
20	20-21.5	B-2 (20-21.5)	7	7	6		100	0.0	Poorly Sorted Fine-Course Dark Brown Wet Sand, 10% Pebbles No Odor					20
21														21
22														22
23														23
24														24
25	25-26.5	B-2 (25-26.5)	17	50			100	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor					25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-3
Sheet: 1 of 1
Surface Elevation (ft-asl):

BoringData

Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

Boring Depth: 25ft
Water Depth: 22ft

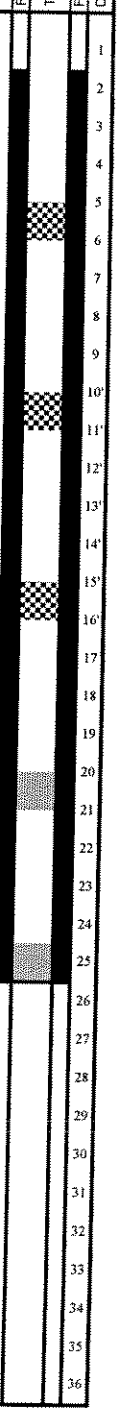
Project Manager: Jim Borthen
Drilling Contracto Cascade Drilling

ENSR Bratz 2/15/2005
Driller: 2/15/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description
5	5-6.5	X	5	5	4		100	0.0	Well Sorted Fine Brown Damp Sand, <5% Pebbles No Odor	
10	10-11.5	X	27	30	35		50	0.0	Well Sorted Fine Brown Damp Sand, 10% Pebbles No Odor	
15	15-16.5	B-3 (15-16.5)	11	19	24		60	0.0	Poorly Sorted Fine-Course Brown Damp Sand, 10% Pebbles No Odor	
20	20-21.5	B-3 (20-21.5)	19	21	26		75	0.0	Well Sorted Fine/Medium Wet Brown Sand, <5% Pebbles No Odor	
25	25-26.5	B-3 (25-26.5)	7	18	19		100	2.3	Well Sorted Fine/Medium Wet Brown Sand, <5% Pebbles No Odor	

Native Backfill

Bentonite seal



F: Fine, M: Medium; C: Coarse

Project Number: 06940-248 *Client:* UNOCAL *Site Location:* Chelan, WA	ENSR 9521 Willows Rd. NE Redmond, Washington (425) 881-7700	**Boring Log** Use: *Boring Number:* B-4 *Sheet:* 1 of 1 *Surface Elevation (ft-msl):*	**BoringData** Boring Depth: 25ft Water Depth: 22ft
Project Manager: Jim Borthen	*ENSR* Bratz 2/16/2005	*Equipment:* Auger-mounted Drill Rig	
Drilling Contracto Cascade Drilling	*Driller:* 2/16/2005	*Inside Diameter:* 0.5 ft *Outside Diameter:* 0.5 ft	

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description	Fill Mat.	Tube	Fill Mat.	Depth
1										Native Backfill				1
2										Bentonite seal				2
3														3
4														4
5	5-6.5	X	13	20	25		50	1.0	Well Sorted Fine Brown Damp Sand, No Pebbles No Odor					5
6														6
7														7
8														8
9														9
10	10-11.5	X	13	14	17		50	1.0	Poorly Sorted Fine-Course Light Brown Damp Sand, 20% Pebbles No Odor					10
11														11
12														12
13														13
14														14
15	15-16.5	B-4 (15-16.5)	9	19	23		100	0.5	Poorly Sorted Fine-Course Dark Brown Damp Sand, 10% Pebbles No Odor					15
16														16
17														17
18														18
19														19
20	20-21.5	B-4 (20-21.5)	8	12	20		75	0.6	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor					20
21									▼					21
22														22
23														23
24														24
25	25-26.5	B-4 (25-26.5)	18	21	23		100	0.0	Well Sorted Fine/Medium Wet Brown Sand, No Pebbles No Odor					25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-5
Sheet: 1 of 1
Surface Elevation (ft-asl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

BoringData

Boring Depth: 25ft
Water Depth: 22ft

Project Manager: Jim Borthen | ENSR | Bratz | 2/15/2005
Drilling Contracto Cascade Drilling | Driller: | 2/15/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description	Fill Mat.	Tube	Fill Mat.	Depth
1										Native Backfill				1
2										Bentonite seal				2
3														3
4														4
5	5-6.5	X	21	50			0	0	No Recovery					5
6														6
7														7
8														8
9														9
10	10-11.5	B-5 (10-11.5)	65				50	119	Well Sorted Fine Gray Dry Sand, 50% Pebbles Petroleum Odor					10'
11														11'
12														12'
13														13'
14														14'
15	15-16.5	B-5 (15-16.5)	31	50			60	150	Poorly Sorted Fine-Course Gray/Green Damp Sand, 30% Pebbles Petroleum Odor					15'
16														16'
17														17
18														18
19														19
20	20-21.5	B-5 (20-21.5)	21	31	36		5	185	Well Sorted Fine Wet Gray Sand, No Pebbles Petroleum Odor					20
21								▼						21
22														22
23														23
24														24
25	25-26.5	B-5 (25-26.5)	18	21	22		100	85	Well Sorted Fine Wet Gray Sand, No Pebbles Petroleum Odor					25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36

F: Fine; M: Medium; C: Course

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7760

Boring Log

Use:
Boring Number: B-6
Sheet: 1 of 1
Surface Elevation (ft-asl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

BoringData

Boring Depth: 25ft
Water Depth: 22ft

Project Manager: Jim Borthen
Drilling Contractor: Cascade Drilling
ENSR Bratz 2/16/2005
Driller: 2/16/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description	Fill Mat.	Tube	Fill Mat.	Depth
1										Native Backfill				1
2										Bentonite seal				2
3														3
4														4
5	5-6.5	X	9	11	13		90	1.1	Poorly Sorted Fine-Course Brown Dry Sand, 40% Pebbles No Odor					5
6														6
7														7
8														8
9														9
10	10-11.5	X	10	15	15		50	0.8	Poorly Sorted Fine-Course Brown Dry Sand, 50% Pebbles No Odor					10
11														11
12														12
13														13
14														14
15	15-16.5	B-6 (15-16.5)	11	50			100	54.7	Medium Sorted Fine/Medium Light Brown Damp Sand, <5% Pebbles Slight Petroleum Odor					15
16														16
17														17
18														18
19														19
20	20-21.5	B-6 (20-21.5)	13	17	24		100	59.7	Poorly Sorted Fine-Course Brown/Gray Wet Sand, <5% Pebbles Slight Petroleum Odor					20
21								▼						21
22														22
23														23
24														24
25	25-26.5	B-6 (25-26.5)	15	15	16		100	8.0	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor					25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
33														33
34														34
35														35
36														36

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-7
Sheet: 1 of 1
Surface Elevation (ft-asl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

Boring Data

Boring Depth: 25ft
Water Depth: 25ft

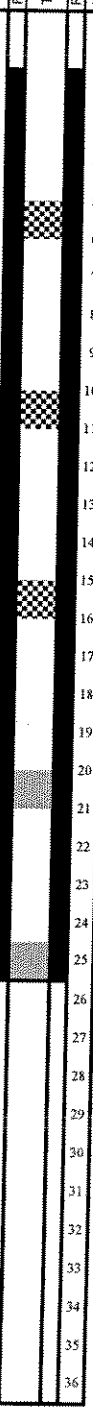
Project Manager: Jim Borthen | ENSR | Bratz | 2/15/2005
Drilling Contractor: Cascade Drilling | Driller: | 2/15/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description
5	5-6.5	X	20	25	39		75	0.0	Poorly Sorted Fine-Course Brown Dry Sand, 30% Pebbles No Odor	
10	10-11.5	X	21	24	28		60	0.0	Poorly Sorted Fine-Course Brown Dry Sand, 20% Pebbles No Odor	
15	15-16.5	B-7 (15-16.5)	24	25	27		75	0.0	Poorly Sorted Fine-Course Brown Dry Sand, 20% Pebbles No Odor	
20	20-21.5	B-7 (20-21.5)	21	25	29		100	0.0	Well Sorted Fine Damp Light Brown Sand, <5% Pebbles No Odor	
25	25-26.5	B-7 (25-26.5)	7	12	22		100	0.0	Well Sorted Medium/Coarse Wet Brown Sand, <5% Pebbles No Odor	

Native Backfill

Bentonite seal

F: Fine; M: Medium; C: Coarse



Project Number: 06940-248
Client: UNOCAL

Site Location: Chelan, WA

ENSR
9521 Willows Rd. NE
Redmond, Washington
(425) 881-7700

Boring Log

Use:
Boring Number: B-8
Sheet: 1 of 1
Surface Elevation (ft-msl):
Equipment: Auger-mounted Drill Rig
Inside Diameter: 0.5 ft
Outside Diameter: 0.5 ft

BoringData

Boring Depth: 25ft
Water Depth: 22ft

Project Manager: Jim Borthen
Drilling Contracto Cascade Drilling

ENSR Bratz 2/16/2005
Driller: 2/16/2005

Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification	Description
5	5-6.5	X	29	35	39		40	0.8	Poorly Sorted Fine-Course Brown Damp Sand, 10% Pebbles No Odor	
10	10-11.5	X	12	18	19		25	0.3	Poorly Sorted Fine-Course Brown Damp Sand, 30% Pebbles No Odor	
15	15-16.5	B-7 (15-16.5)	8	9	10		100	0.1	Well Sorted Fine Damp Brown Sand, 10% Pebbles No Odor	
20	20-21.5	B-7 (20-21.5)	14	16	19		75	0.3	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor	
25	25-26.5	B-7 (25-26.5)	15	15	15		100	0.1	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor	

Native Backfill

Bentonite seal

F: Fine; M: Medium; C: Coarse

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11 March 2005

Jim Borthen
ENSR-Redmond
9521 Willows Road NE
Redmond, WA 98052

RE: UNOCAL #0082

Enclosed are the results of analyses for samples received by the laboratory on 02/17/05 14:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeff Gerdes

Jeff Gerdes
Project Manager

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907.563.9200 fax 907.563.9210

ENSR-Redmond
9521 Willows Road NE
Redmond, WA 98052

Project: UNOCAL #0082
Project Number: 06940-248
Project Manager: Jim Borthen

Reported:
03/11/05 07:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1(3.5-4)	B5B0435-01	Soil	02/15/05 12:00	02/17/05 14:53
B1(8.5-9)	B5B0435-02	Soil	02/15/05 12:05	02/17/05 14:53
B1(13.5-14)	B5B0435-03	Soil	02/15/05 12:10	02/17/05 14:53
B1(18.5-20)	B5B0435-04	Soil	02/15/05 12:15	02/17/05 14:53
B2(5-6.5)	B5B0435-05	Soil	02/15/05 13:00	02/17/05 14:53
B2(15-16.5)	B5B0435-06	Soil	02/15/05 13:10	02/17/05 14:53
B2(20-21.5)	B5B0435-07	Soil	02/15/05 13:15	02/17/05 14:53
B2(25-26.5)	B5B0435-08	Soil	02/15/05 13:20	02/17/05 14:53
B3(15-16.5)	B5B0435-09	Soil	02/15/05 14:00	02/17/05 14:53
B3(20-21.5)	B5B0435-10	Soil	02/15/05 14:25	02/17/05 14:53
B3(25-26.5)	B5B0435-11	Soil	02/15/05 14:30	02/17/05 14:53
B4(15-16.5)	B5B0435-12	Soil	02/16/05 11:35	02/17/05 14:53
B4(20-21.5)	B5B0435-13	Soil	02/16/05 11:40	02/17/05 14:53
B4(25-26.5)	B5B0435-14	Soil	02/16/05 11:45	02/17/05 14:53
B5(10-11.5)	B5B0435-15	Soil	02/15/05 16:15	02/17/05 14:53
B5(15-16.5)	B5B0435-16	Soil	02/15/05 16:20	02/17/05 14:53
B5(20-21.5)	B5B0435-17	Soil	02/15/05 16:25	02/17/05 14:53
B5(25-26.5)	B5B0435-18	Soil	02/15/05 16:30	02/17/05 14:53
B6(15-16.5)	B5B0435-19	Soil	02/16/05 10:40	02/17/05 14:53
B6(20-21.5)	B5B0435-20	Soil	02/16/05 10:45	02/17/05 14:53
B6(25-26.5)	B5B0435-21	Soil	02/16/05 10:50	02/17/05 14:53
B7(15-16.5)	B5B0435-22	Soil	02/15/05 15:15	02/17/05 14:53
B7(20-21.5)	B5B0435-23	Soil	02/15/05 15:20	02/17/05 14:53
B7(25-26.5)	B5B0435-24	Soil	02/15/05 15:30	02/17/05 14:53
B8(15-16.5)	B5B0435-25	Soil	02/16/05 08:50	02/17/05 14:53
B8(20-21.5)	B5B0435-26	Soil	02/16/05 08:55	02/17/05 14:53
B8(25-26.5)	B5B0435-27	Soil	02/16/05 09:00	02/17/05 14:53

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Gerdes, Project Manager

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*69.0 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*101 %*	*53-142*			"	"	"	"	
B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*78.3 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*77.6 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*101 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Gerdes, Project Manager

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	3.91	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0235	"	"	"	"	"	"	
Toluene	ND	0.0391	"	"	"	"	"	"	
Ethylbenzene	ND	0.0391	"	"	"	"	"	"	
Xylenes (total)	ND	0.0782	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*80.5 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*102 %*	*53-142*			"	"	"	"	
B2(5-6.5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**8.19**	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*80.7 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*102 %*	*53-142*			"	"	"	"	
B2(15-16.5) (B5B0435-06) Soil Sampled: 02/15/05 13:10 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	7.12	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0427	"	"	"	"	"	"	
Toluene	ND	0.0712	"	"	"	"	"	"	
Ethylbenzene	ND	0.0712	"	"	"	"	"	"	
Xylenes (total)	ND	0.142	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*79.0 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Gerdes, Project Manager

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B2(20-21.5) (B5B0435-07) Soil Sampled: 02/15/05 13:15 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*79.8 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B2(25-26.5) (B5B0435-08) Soil Sampled: 02/15/05 13:20 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*80.3 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B3(15-16.5) (B5B0435-09) Soil Sampled: 02/15/05 14:00 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*70.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3(20-21.5) (B5B0435-10) Soil Sampled: 02/15/05 14:25 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.52	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0271	"	"	"	"	"	"	
Toluene	ND	0.0452	"	"	"	"	"	"	
Ethylbenzene	ND	0.0452	"	"	"	"	"	"	
Xylenes (total)	ND	0.0905	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*73.4 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*74.3 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*98.8 %*	*53-142*			"	"	"	"	
B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.48	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0269	"	"	"	"	"	"	
Toluene	ND	0.0448	"	"	"	"	"	"	
Ethylbenzene	ND	0.0448	"	"	"	"	"	"	
Xylenes (total)	ND	0.0897	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*76.2 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*99.3 %*	*53-142*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.48	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0269	"	"	"	"	"	"	
Toluene	ND	0.0448	"	"	"	"	"	"	
Ethylbenzene	ND	0.0448	"	"	"	"	"	"	
Xylenes (total)	ND	0.0896	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*78.5 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*101 %*	*53-142*			"	"	"	"	
B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.13	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0248	"	"	"	"	"	"	
Toluene	ND	0.0413	"	"	"	"	"	"	
Ethylbenzene	ND	0.0413	"	"	"	"	"	"	
Xylenes (total)	ND	0.0826	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*79.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**281**	5.00	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	**0.188**	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*124 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*106 %*	*53-142*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53									
Benzene	ND	0.0250	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Toluene	ND	0.0416	"	"	"	"	"	"	
Ethylbenzene	**0.167**	0.0416	"	"	"	"	"	"	
Xylenes (total)	**0.600**	0.0833	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*>200 %*	*50-150*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*146 %*	*53-142*			"	"	"	"	*S-04*
B5(15-16.5) (B5B0435-16RE1) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**1070**	16.7	mg/kg dry	4	5B27003	02/27/05	02/28/05	NWTPH-Gx/8021B	G-02
Surrogate: 4-BFB (FID)	*119 %*	*50-150*			"	"	"	"	
B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53									
Benzene	ND	0.0247	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Toluene	ND	0.0412	"	"	"	"	"	"	
Xylenes (total)	**0.983**	0.0823	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*>200 %*	*50-150*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*164 %*	*53-142*			"	"	"	"	*S-04*
B5(20-21.5) (B5B0435-17RE1) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**1140**	16.5	mg/kg dry	4	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Ethylbenzene	**0.268**	0.165	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*120 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*116 %*	*53-142*			"	"	"	"	
B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**373**	5.00	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	**0.0769**	0.0500	"	"	"	"	"	"	
Xylenes (total)	**0.143**	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*111 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*112 %*	*53-142*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**242**	4.44	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0267	"	"	"	"	"	"	
Toluene	ND	0.0444	"	"	"	"	"	"	
Ethylbenzene	ND	0.0444	"	"	"	"	"	"	
Xylenes (total)	ND	0.0889	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*102 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*106 %*	*53-142*			"	"	"	"	
B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**378**	4.08	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0245	"	"	"	"	"	"	
Toluene	ND	0.0408	"	"	"	"	"	"	
Ethylbenzene	ND	0.0408	"	"	"	"	"	"	
Xylenes (total)	**0.230**	0.0816	"	"	"	"	"	"	I-06
Surrogate: 4-BFB (FID)	*103 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	**30.8**	4.34	mg/kg dry	1	5B27003	02/27/05	02/28/05	NWTPH-Gx/8021B	G-01
Benzene	ND	0.0260	"	"	"	"	"	"	
Toluene	ND	0.0434	"	"	"	"	"	"	
Ethylbenzene	ND	0.0434	"	"	"	"	"	"	
Xylenes (total)	ND	0.0868	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*72.6 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*99.7 %*	*53-142*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B7(15-16.5) (B5B0435-22) Soil Sampled: 02/15/05 15:15 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*78.1 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*113 %*	*53-142*			"	"	"	"	
B7(20-21.5) (B5B0435-23) Soil Sampled: 02/15/05 15:20 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*78.8 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*105 %*	*53-142*			"	"	"	"	
B7(25-26.5) (B5B0435-24) Soil Sampled: 02/15/05 15:30 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.15	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0249	"	"	"	"	"	"	
Toluene	ND	0.0415	"	"	"	"	"	"	
Ethylbenzene	ND	0.0415	"	"	"	"	"	"	
Xylenes (total)	ND	0.0829	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*81.3 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*98.9 %*	*53-142*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B8(15-16.5) (B5B0435-25) Soil Sampled: 02/16/05 08:50 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.44	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0266	"	"	"	"	"	"	
Toluene	ND	0.0444	"	"	"	"	"	"	
Ethylbenzene	ND	0.0444	"	"	"	"	"	"	
Xylenes (total)	ND	0.0887	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*70.8 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*98.7 %*	*53-142*			"	"	"	"	
B8(20-21.5) (B5B0435-26) Soil Sampled: 02/16/05 08:55 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*71.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*100 %*	*53-142*			"	"	"	"	
B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53									
Gasoline Range Hydrocarbons	ND	4.55	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0273	"	"	"	"	"	"	
Toluene	ND	0.0455	"	"	"	"	"	"	
Ethylbenzene	ND	0.0455	"	"	"	"	"	"	
Xylenes (total)	ND	0.0909	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*74.4 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*99.4 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*54.5 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*94.6 %*	*50-150*			"	"	"	"	
B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*55.8 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*90.8 %*	*50-150*			"	"	"	"	
B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*55.6 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*92.4 %*	*50-150*			"	"	"	"	
B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*50.8 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*91.6 %*	*50-150*			"	"	"	"	
B2(5-6.5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**35.3**	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	D-09
Lube Oil Range Hydrocarbons	**28.5**	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*59.6 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*98.2 %*	*50-150*			"	"	"	"	

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B2(15-16.5) (B5B0435-06) Soil Sampled: 02/15/05 13:10 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**11.3**	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	D-06
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*51.4 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*94.5 %*	*50-150*			"	"	"	"	
B2(20-21.5) (B5B0435-07) Soil Sampled: 02/15/05 13:15 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*54.2 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*91.1 %*	*50-150*			"	"	"	"	
B2(25-26.5) (B5B0435-08) Soil Sampled: 02/15/05 13:20 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*68.3 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*106 %*	*50-150*			"	"	"	"	
B3(15-16.5) (B5B0435-09) Soil Sampled: 02/15/05 14:00 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*75.7 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*109 %*	*50-150*			"	"	"	"	
B3(20-21.5) (B5B0435-10) Soil Sampled: 02/15/05 14:25 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*80.5 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*121 %*	*50-150*			"	"	"	"	

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*74.1 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*112 %*	*50-150*			"	"	"	"	
B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*64.2 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*87.4 %*	*50-150*			"	"	"	"	
B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*76.3 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*110 %*	*50-150*			"	"	"	"	
B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*73.4 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*113 %*	*50-150*			"	"	"	"	
B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	**60.1**	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	*194 %*	*50-150*			"	"	"	"	*S-04*

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5(10-11.5) (B5B0435-15RE1) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**3080**	200	mg/kg dry	20	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	**75.4**	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	*>200 %*	*50-150*			"	"	"	"	*S-04*
B5(15-16.5) (B5B0435-16RE1) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**2870**	200	mg/kg dry	20	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	**104**	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	*>200 %*	*50-150*			"	"	"	"	*S-04*
B5(20-21.5) (B5B0435-17RE1) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**4690**	400	mg/kg dry	40	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	ND	125	mg/kg dry	5	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Surrogate: Octacosane	*151 %*	*50-150*			"	"	"	"	*S-04*

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Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5(25-26.5) (B5B0435-18RE1) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**2260**	100	mg/kg dry	10	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	ND	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Surrogate: Octacosane	*162 %*	*50-150*			"	"	"	"	*S-04*
B6(15-16.5) (B5B0435-19RE1) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**1800**	100	mg/kg dry	10	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53									
Lube Oil Range Hydrocarbons	**58.6**	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	*161 %*	*50-150*			"	"	"	"	*S-04*
B6(20-21.5) (B5B0435-20RE1) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**7370**	400	mg/kg dry	40	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	*ND*	*50-150*			"	"	"	"	*S-01*
Surrogate: Octacosane	*ND*	*50-150*			"	"	"	"	*S-01*
B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	**86.7**	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*82.8 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*119 %*	*50-150*			"	"	"	"	

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9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B7(15-16.5) (B5B0435-22) Soil Sampled: 02/15/05 15:15 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*81.0 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*112 %*	*50-150*			"	"	"	"	
B7(20-21.5) (B5B0435-23) Soil Sampled: 02/15/05 15:20 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*81.6 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*109 %*	*50-150*			"	"	"	"	
B7(25-26.5) (B5B0435-24) Soil Sampled: 02/15/05 15:30 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*81.4 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*117 %*	*50-150*			"	"	"	"	
B8(15-16.5) (B5B0435-25) Soil Sampled: 02/16/05 08:50 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*77.2 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*109 %*	*50-150*			"	"	"	"	
B8(20-21.5) (B5B0435-26) Soil Sampled: 02/16/05 08:55 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*72.5 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*109 %*	*50-150*			"	"	"	"	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	*83.8 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*110 %*	*50-150*			"	"	"	"	

North Creek Analytical - Bothell

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Jeff Gerdes, Project Manager

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Physical Parameters by APHA/ASTM/EPA Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53									
Dry Weight	**92.7**	1.00	%	1	5B19003	02/19/05	02/20/05	BSOPSPL003R08	
B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53									
Dry Weight	**97.7**	1.00	%	1	5B19003	02/19/05	02/20/05	BSOPSPL003R08	
B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53									
Dry Weight	**95.5**	1.00	%	1	5B19003	02/19/05	02/20/05	BSOPSPL003R08	
B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53									
Dry Weight	**88.1**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B2(5-6.5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53									
Dry Weight	**97.7**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B2(15-16.5) (B5B0435-06) Soil Sampled: 02/15/05 13:10 Received: 02/17/05 14:53									
Dry Weight	**94.3**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B2(20-21.5) (B5B0435-07) Soil Sampled: 02/15/05 13:15 Received: 02/17/05 14:53									
Dry Weight	**90.5**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B2(25-26.5) (B5B0435-08) Soil Sampled: 02/15/05 13:20 Received: 02/17/05 14:53									
Dry Weight	**81.0**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B3(15-16.5) (B5B0435-09) Soil Sampled: 02/15/05 14:00 Received: 02/17/05 14:53									
Dry Weight	**92.7**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Physical Parameters by APHA/ASTM/EPA Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3(20-21.5) (B5B0435-10) Soil Sampled: 02/15/05 14:25 Received: 02/17/05 14:53									
Dry Weight	**84.8**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53									
Dry Weight	**84.8**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53									
Dry Weight	**92.7**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53									
Dry Weight	**90.2**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53									
Dry Weight	**87.3**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53									
Dry Weight	**95.8**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53									
Dry Weight	**96.2**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53									
Dry Weight	**89.6**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53									
Dry Weight	**87.6**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Physical Parameters by APHA/ASTM/EPA Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53									
Dry Weight	**94.0**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53									
Dry Weight	**79.3**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53									
Dry Weight	**87.0**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B7(15-16.5) (B5B0435-22) Soil Sampled: 02/15/05 15:15 Received: 02/17/05 14:53									
Dry Weight	**95.8**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B7(20-21.5) (B5B0435-23) Soil Sampled: 02/15/05 15:20 Received: 02/17/05 14:53									
Dry Weight	**92.0**	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
B7(25-26.5) (B5B0435-24) Soil Sampled: 02/15/05 15:30 Received: 02/17/05 14:53									
Dry Weight	**91.1**	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
B8(15-16.5) (B5B0435-25) Soil Sampled: 02/16/05 08:50 Received: 02/17/05 14:53									
Dry Weight	**89.3**	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
B8(20-21.5) (B5B0435-26) Soil Sampled: 02/16/05 08:55 Received: 02/17/05 14:53									
Dry Weight	**92.4**	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53									
Dry Weight	**84.2**	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B25025: Prepared 02/25/05 Using EPA 5030B (MeOH)										
Blank (5B25025-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.14*		"	*3.00*		*71.3*	*50-150*			
Surrogate: 4-BFB (PID)	*2.89*		"	*3.00*		*96.3*	*53-142*			
LCS (5B25025-BS1)										
Gasoline Range Hydrocarbons	45.4	5.00	mg/kg	50.0		90.8	75-125			
Benzene	0.607	0.0300	"	0.730		83.2	75-125			
Toluene	3.28	0.0500	"	3.64		90.1	75-125			
Ethylbenzene	0.880	0.0500	"	0.855		103	75-125			Q-41
Xylenes (total)	4.11	0.100	"	4.17		98.6	75-125			
Surrogate: 4-BFB (FID)	*2.46*		"	*3.00*		*82.0*	*50-150*			
Surrogate: 4-BFB (PID)	*2.71*		"	*3.00*		*90.3*	*53-142*			
LCS Dup (5B25025-BSD1)										
Gasoline Range Hydrocarbons	46.0	5.00	mg/kg	50.0		92.0	75-125	1.31	25	
Benzene	0.658	0.0300	"	0.730		90.1	75-125	8.06	25	
Toluene	3.08	0.0500	"	3.64		84.6	75-125	6.29	25	
Ethylbenzene	0.825	0.0500	"	0.855		96.5	75-125	6.45	25	Q-41
Xylenes (total)	3.86	0.100	"	4.17		92.6	75-125	6.27	25	
Surrogate: 4-BFB (FID)	*2.63*		"	*3.00*		*87.7*	*50-150*			
Surrogate: 4-BFB (PID)	*2.57*		"	*3.00*		*85.7*	*53-142*			
Matrix Spike (5B25025-MS1)					**Source: B5B0435-02**					
Gasoline Range Hydrocarbons	61.5	5.00	mg/kg dry	51.2	3.86	113	42-125			
Benzene	0.638	0.0300	"	0.747	ND	85.4	45-125			
Toluene	3.32	0.0500	"	3.73	0.0122	88.7	55-125			
Ethylbenzene	0.875	0.0500	"	0.875	0.00447	99.5	53-132			
Xylenes (total)	4.13	0.100	"	4.27	0.0177	96.3	59-125			
Surrogate: 4-BFB (FID)	*2.96*		"	*3.07*		*96.4*	*50-150*			
Surrogate: 4-BFB (PID)	*2.61*		"	*3.07*		*85.0*	*53-142*			

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B25025: Prepared 02/25/05 Using EPA 5030B (MeOH)										
Matrix Spike Dup (5B25025-MSD1)					**Source: B5B0435-02**					
Gasoline Range Hydrocarbons	57.7	5.00	mg/kg dry	51.2	3.86	105	42-125	6.38	40	
Benzene	0.638	0.0300	"	0.747	ND	85.4	45-125	0.00	40	
Toluene	3.32	0.0500	"	3.73	0.0122	88.7	55-125	0.00	40	
Ethylbenzene	0.878	0.0500	"	0.875	0.00447	99.8	53-132	0.342	40	
Xylenes (total)	4.11	0.100	"	4.27	0.0177	95.8	59-125	0.485	40	
Surrogate: 4-BFB (FID)	*2.96*		"	*3.07*		*96.4*	*50-150*			
Surrogate: 4-BFB (PID)	*2.58*		"	*3.07*		*84.0*	*53-142*			
Batch 5B27003: Prepared 02/27/05 Using EPA 5030B (MeOH)										
Blank (5B27003-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.37*		"	*3.00*		*79.0*	*50-150*			
Surrogate: 4-BFB (PID)	*3.02*		"	*3.00*		*101*	*53-142*			
LCS (5B27003-BS1)										
Gasoline Range Hydrocarbons	46.6	5.00	mg/kg	50.0		93.2	75-125			
Benzene	0.598	0.0300	"	0.730		81.9	75-125			
Toluene	3.08	0.0500	"	3.64		84.6	75-125			
Ethylbenzene	0.822	0.0500	"	0.855		96.1	75-125			
Xylenes (total)	3.79	0.100	"	4.17		90.9	75-125			
Surrogate: 4-BFB (FID)	*2.48*		"	*3.00*		*82.7*	*50-150*			
Surrogate: 4-BFB (PID)	*2.46*		"	*3.00*		*82.0*	*53-142*			

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B27003: Prepared 02/27/05 Using EPA 5030B (MeOH)										
LCS Dup (5B27003-BSD1)										
Gasoline Range Hydrocarbons	59.1	5.00	mg/kg	50.0		118	75-125	23.7	25	
Benzene	0.641	0.0300	"	0.730		87.8	75-125	6.94	25	
Toluene	3.29	0.0500	"	3.64		90.4	75-125	6.59	25	
Ethylbenzene	0.888	0.0500	"	0.855		104	75-125	7.72	25	
Xylenes (total)	4.08	0.100	"	4.17		97.8	75-125	7.37	25	
Surrogate: 4-BFB (FID)	*2.87*		"	*3.00*		*95.7*	*50-150*			
Surrogate: 4-BFB (PID)	*2.40*		"	*3.00*		*80.0*	*53-142*			
Matrix Spike (5B27003-MS1)					**Source: B5B0616-02**					
Gasoline Range Hydrocarbons	83.4	6.31	mg/kg dry	74.0	4.01	107	42-125			
Benzene	1.01	0.0378	"	1.08	ND	93.5	45-125			
Toluene	4.82	0.0631	"	5.39	0.0211	89.0	55-125			
Ethylbenzene	1.27	0.0631	"	1.27	0.0124	99.0	53-132			
Xylenes (total)	5.99	0.126	"	6.17	0.0262	96.7	59-125			
Surrogate: 4-BFB (FID)	*4.20*		"	*4.44*		*94.6*	*50-150*			
Surrogate: 4-BFB (PID)	*3.75*		"	*4.44*		*84.5*	*53-142*			
Matrix Spike Dup (5B27003-MSD1)					**Source: B5B0616-02**					
Gasoline Range Hydrocarbons	77.1	6.31	mg/kg dry	74.0	4.01	98.8	42-125	7.85	40	
Benzene	0.923	0.0378	"	1.08	ND	85.5	45-125	9.00	40	
Toluene	4.83	0.0631	"	5.39	0.0211	89.2	55-125	0.207	40	
Ethylbenzene	1.27	0.0631	"	1.27	0.0124	99.0	53-132	0.00	40	
Xylenes (total)	5.99	0.126	"	6.17	0.0262	96.7	59-125	0.00	40	
Surrogate: 4-BFB (FID)	*4.04*		"	*4.44*		*91.0*	*50-150*			
Surrogate: 4-BFB (PID)	*3.77*		"	*4.44*		*84.9*	*53-142*			

North Creek Analytical - Bothell

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ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B18051: Prepared 02/18/05 Using EPA 3550B										
Blank (5B18051-BLK1)										
Diesel Range Hydrocarbons	ND	10.0	mg/kg							
Lube Oil Range Hydrocarbons	ND	25.0	"							
Surrogate: 2-FBP	*4.75*		"	*8.33*		*57.0*	*50-150*			
Surrogate: Octacosane	*8.10*		"	*8.33*		*97.2*	*50-150*			
LCS (5B18051-BS1)										
Diesel Range Hydrocarbons	66.3	10.0	mg/kg	66.7		99.4	61-120			
Surrogate: 2-FBP	*5.94*		"	*8.33*		*71.3*	*50-150*			
LCS Dup (5B18051-BSD1)										
Diesel Range Hydrocarbons	65.0	10.0	mg/kg	66.7		97.5	61-120	1.98	40	
Surrogate: 2-FBP	*6.05*		"	*8.33*		*72.6*	*50-150*			
Duplicate (5B18051-DUP1)					**Source: B5B0435-01**					
Diesel Range Hydrocarbons	7.55	10.0	mg/kg dry		4.20			57.0	50	Q-07
Lube Oil Range Hydrocarbons	45.9	25.0	"		21.8			71.2	50	Q-07
Surrogate: 2-FBP	*5.15*		"	*8.99*		*57.3*	*50-150*			
Surrogate: Octacosane	*8.37*		"	*8.99*		*93.1*	*50-150*			
Batch 5B23056: Prepared 02/23/05 Using EPA 3550B										
Blank (5B23056-BLK1)										
Diesel Range Hydrocarbons	ND	10.0	mg/kg							
Lube Oil Range Hydrocarbons	ND	25.0	"							
Surrogate: 2-FBP	*6.43*		"	*8.33*		*77.2*	*50-150*			
Surrogate: Octacosane	*10.1*		"	*8.33*		*121*	*50-150*			

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907.563.9200 fax 907.563.9210

ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B23056: Prepared 02/23/05 Using EPA 3550B										
LCS (5B23056-BS1)										
Diesel Range Hydrocarbons	57.2	10.0	mg/kg	66.7		85.8	61-120			
Surrogate: 2-FBP	*6.31*		"	*8.33*		*75.8*	*50-150*			
LCS Dup (5B23056-BSD1)										
Diesel Range Hydrocarbons	59.0	10.0	mg/kg	66.7		88.5	61-120	3.10	40	
Surrogate: 2-FBP	*6.65*		"	*8.33*		*79.8*	*50-150*			
Duplicate (5B23056-DUP1)					**Source: B5B0435-18**					
Lube Oil Range Hydrocarbons	79.5	125	mg/kg dry		42.8			60.0	50	Q-02
Surrogate: Octacosane	*17.2*		"	*9.42*		*183*	*50-150*			*S-04*
Duplicate (5B23056-DUP2)					**Source: B5B0435-18RE1**					
Diesel Range Hydrocarbons	3860	200	mg/kg dry		2260			52.3	50	Q-02
Lube Oil Range Hydrocarbons	78.3	500	"		68.4			13.5	50	
Surrogate: 2-FBP	*ND*		"	*9.42*		*ND*	*50-150*			*S-01*
Surrogate: Octacosane	*ND*		"	*9.42*		*ND*	*50-150*			*S-01*

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Gerdes, Project Manager

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907.563.9200 fax 907.563.9210

ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5B19003: Prepared 02/19/05 Using General Preparation										
Blank (5B19003-BLK1)										
Dry Weight	100	1.00	%							
Batch 5B20008: Prepared 02/20/05 Using General Preparation										
Blank (5B20008-BLK1)										
Dry Weight	100	1.00	%							
Batch 5B20009: Prepared 02/20/05 Using General Preparation										
Blank (5B20009-BLK1)										
Dry Weight	100	1.00	%							

North Creek Analytical - Bothell

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Jeff Gerdes

Jeff Gerdes, Project Manager

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907.563.9200 fax 907.563.9210

ENSR-Redmond	Project: UNOCAL #0082	
9521 Willows Road NE	Project Number: 06940-248	**Reported:**
Redmond, WA 98052	Project Manager: Jim Borthen	03/11/05 07:49

Notes and Definitions

D-06	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
D-09	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
D-10	The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
G-01	Results reported for the gas range are primarily due to overlap from diesel range hydrocarbons.
G-02	The chromatogram for this sample does not resemble a typical gasoline pattern. Please refer to the sample chromatogram.
I-06	The analyte concentration may be artificially elevated due to coeluting compounds or components.
Q-02	The spike recovery for this QC sample is outside of NCA established control limits due to sample matrix interference.
Q-07	The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
Q-41	This analyte had a high bias in the associated calibration verification standard.
S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

North Creek Analytical - Bothell

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Jeff Gerdes

Jeff Gerdes, Project Manager

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ENSR CHAIN OF CUSTODY REPORT

B5B0435

SITE INFORMATION	CONSULTANT INFORMATION
Facility Number: 0082	Name: ENSR
Site Address: Hwy 97 & East St.	Address: Redmond 7700
City, State, ZIP: Chelan, WA	Phone: 425-881-5500 Fax:
P.O. Number:	Project No.: Unocal 00940 248
CERT INFO: (check one) ☒ Evaluation ☐ Remediation ☐ Detection ☐ Demolition ☐ Closure ☐ Miscellaneous	Project Manager: Jim Boatman
	Samples collected by: Eric Baatz

Chain of Custody Record #:

Quality Assurance Data Level: ☐ A ☒ B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 10 ☐ 5 ☐ 3 ☐ 2 ☐ 1

☐ AK ☐ OR ☐ WA ☒ NW Series

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W, S, O)	NUMBER OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG cleanup	Halogen. Volatiles EPA	Pesticides/PCBs or PCBs only	GC/MS Volatiles EPA 8260	GC/MS Semivols. EPA 8270	PAHs: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	NCA SAMPLE NUMBER
1. B1 (3.5-4)	2/15 1200	S	2				X			X								B5B0435-01
2. B1 (8.5-9)	1205	S																-02
3. B1 (13.5-14)	1210																	-03
4. B1 (18.5-20)	1215																	-04
5. B2 (5-6.5)	1300																	-05
6. B2 (15-16.5)	1310																	-06
7. B2 (20-21.5)	1315																	-07
8. B2 (25-26.5)	1320																	-08
9. B3 (15-16.5)	1400																	-09
10. B3 (20-21.5)	1425	↓	↓				↓			↓								-10

Relinquished by	Firm	Date/Time	Received by	Firm	Date/Time
1.	ENSR	2/17/05 1455	Cathy Gamble	NCA	2/17/05 14:55
2.					
3.					

Final Report Approval

Were all requested results provided? yes no

Were the results within the requested turnaround? yes no

Define "no" on back

Final approval signature:

Firm: Date:

Page 1 of 3

Comments:

4.2 W/O

ENSR COC rev 12/03

Distribution: White - Laboratory Yellow - Consultant

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ENSR CHAIN OF CUSTODY REPORT

SITE INFORMATION

Facility Number: 0082
Site Address: Hwy 97 & East Street
City, State, ZIP: Chelan, WA
P.O. Number:

CERT INFO: (check one) ☒ Evaluation ☐ Remediation ☐ Detection ☐ Demolition ☐ Closure ☐ Miscellaneous

CONTACT INFORMATION

Name: ENSR
Address: Redmond
Phone: 425-881-7700 Fax:
Project No.: Unocal 06940 248
Project Manager: Jim Bontiten
Samples collected by: Eric Bratz

Chain of Custody Record #:

Quality Assurance Data Level: ☐ A ☒ B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 5 ☐ 3 ☐ 2 ☐ 1

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W, S, O)	NUMBER OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG cleanup	Halogen. Volatiles EPA	Pesticides/PCBs or PCBs only	GC/MS Volatiles EPA 8260	GC/MS Semivols. EPA 8270	PAHs: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	NCA SAMPLE NUMBER
1. B3 (25-26.5)	2/15 1430	S	2				X			X								B5B0435-11
2. B4 (15-16.5)	2/16 1135																	-12
3. B4 (20-21.5)	2/16 1140																	-13
4. B4 (25-26.5)	2/16 1145																	-14
5. B5 (10-11.5)	2/15 1615																	-15
6. B5 (15-16.5)	2/15 1620																	-16
7. B5 (20-21.5)	2/15 1625																	-17
8. B5 (25-26.5)	2/15 1630																	-18
9. B6 (15-16.5)	2/16 1040																	-19
10. B6 (20-21.5)	2/16 1045	↓	↓				↓			↓								-20

Relinquished by	Firm	Date/Time	Received by	Firm	Date/Time
1.	ENSR	2/17/05 1455	Cathy Crumbaker	NCA	2/17/05 14:55
2.					
3.					

Final Report Approval

Were all requested results provided? ☐ yes ☐ no
Were the results within the requested turnaround? ☐ yes ☐ no
Define "no" on back
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Page 2 of 3

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Revised Chain of Custody

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ENSR CHAIN OF CUSTODY REPORT

B5B0435

Facility Number: 0082
Site Address: Hwy 97 & East St.
City, State, ZIP: Chelan, WA
P.O. Number:

CERT INFO: (check one) ☒ Evaluation ☐ Remediation ☐ Detection ☐ Demolition ☐ Closure ☐ Miscellaneous

Name: ENSR
Address: Redmond
Phone: 425-881-7700 Fax:
Project No.: Unocal 00940 248
Project Manager: Jim Bortlein
Samples collected by: Eric Bratz

Chain of Custody Record #:

Quality Assurance Data Level: ☐ A ☒ B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 5 ☐ 3 ☐ 2 ☐ 1

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W, S, O)	NUMBER OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel Ext. w/SG cleanup	Halogen. Volatiles EPA	Pesticides/PCBs or PCBs only	GC/MS Volatiles EPA 8260	GC/MS Semivols. EPA 8270	PAHs: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	NCA SAMPLE NUMBER
1. B6 (25'-26.5')	2/16 1050	S	2				X			X								B5B0435-21
2. B7 (15'-16.5')	2/15 1515																	-22
3. B7 (20-21.5')	2/15 1520																	-23
4. B7 (25'-26.5')	2/15 1530																	-24
5. B8 (15'-16.5')	2/16 0850																	-25
6. B8 (20'-21.5')	2/16 0855																	-26
7. B8 (25'-26.5')	2/16 0900	↓	↓				↓			↓								-27
8. TRIP BLANK	2/15/05 1200	S	4															-28
9.																		
10.																		

Relinquished by	Firm	Date/Time	Received by	Firm	Date/Time
1.	ENSR	2/17/05 1455	Cathy Crumble	NCA	2/11/05 19:55
2.					
3.					

Were all requested results provided? ☐ yes ☐ no
Were the results within the requested turnaround? ☐ yes ☐ no
Define "no" on back
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Comments:

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ENSR COC rev 12/03

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ENSR CHAIN OF CUSTODY REPORT

B5B0435

SITE INFORMATION

Facility Number: 0082
Site Address: Hwy 97 & East St.
City, State, ZIP: Chelan, WA
P.O. Number:

CERT INFO: (check one) ☒ Evaluation ☐ Remediation ☐ Detection ☐ Demolition ☐ Closure ☐ Miscellaneous

CONSULTANT INFORMATION

Name: ENSR
Address: Redmond
Phone: 425-881-7700 Fax:
Project No.: Unocal 06940 248
Project Manager: Jim Borthen
Samples collected by: Eric Bratz

Chain of Custody Record #:

Quality Assurance Data Level: ☐ A ☒ B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 5 ☐ 3 ☐ 2 ☐ 1

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W, S, O)	NUMBER OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG cleanup	Halogen. Volatiles EPA	Pesticides/PCBs or PCBs only	GC/MS Volatiles EPA 8260	GC/MS Semivols. EPA 8270	PAHs: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	NCA SAMPLE NUMBER
1. B6 (25-26.5')	2/16 1050	S	2				X			X								B5B0435.21
2. B7 (15-16.5')	2/15 1515																	-22
3. B7 (20-21.5')	2/15 1520																	-23
4. B7 (25-26.5')	2/15 1530																	-24
5. B8 (15-16.5')	2/16 0850																	-25
6. B8 (20-21.5')	2/16 0855																	-26
7. B8 (25-26.5')	2/16 0900	↓	↓				↓			↓								-27
8.																		
9.																		
10.																		

Relinquished by	Firm	Date/Time	Received by	Firm	Date/Time
1.	ENSR	2/17/05 1455	Cathy Gamble	NCA	2/17/05 14:55
2.					
3.					

Page 3 of 3

Comments:

Final Report Approval

Were all requested results provided? ☐ yes ☐ no
Were the results within the requested turnaround? ☐ yes ☐ no
Define "no" on back

Final approval signature:

Firm: Date:

ENSR COC rev 12/03

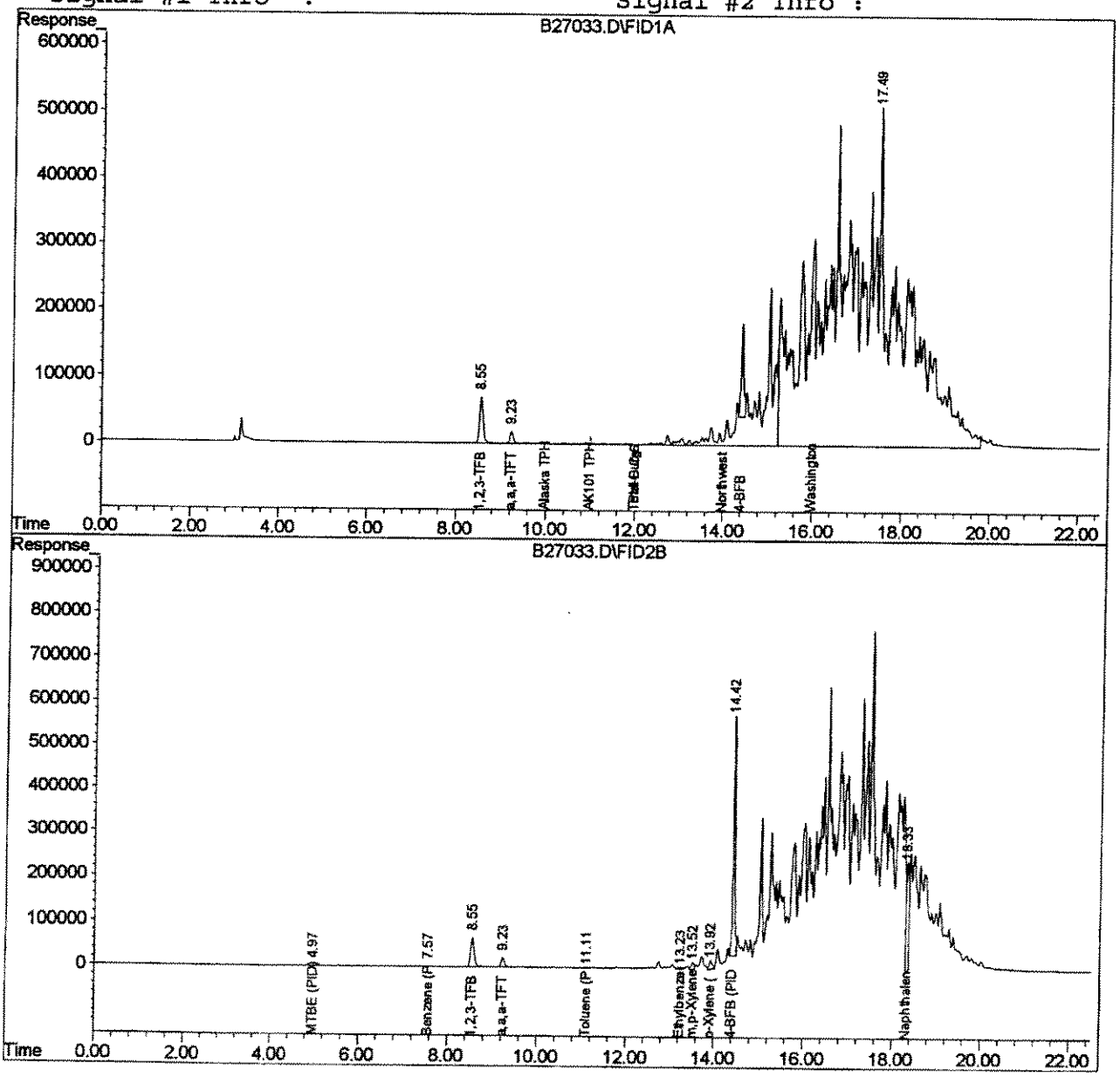
Distribution: White - Laboratory Yellow - Consultant

Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27033.D\FID1A.CH Vial: 33
Signal #2 : D:\HPCHEM\3\DATA\022705\B27033.D\FID2B.CH
Acq On : 28 Feb 2005 3:28 Operator: aa
Sample : b5b0435-16re1 Inst : GC #6
Misc : 4x 25 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 2 15:22 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

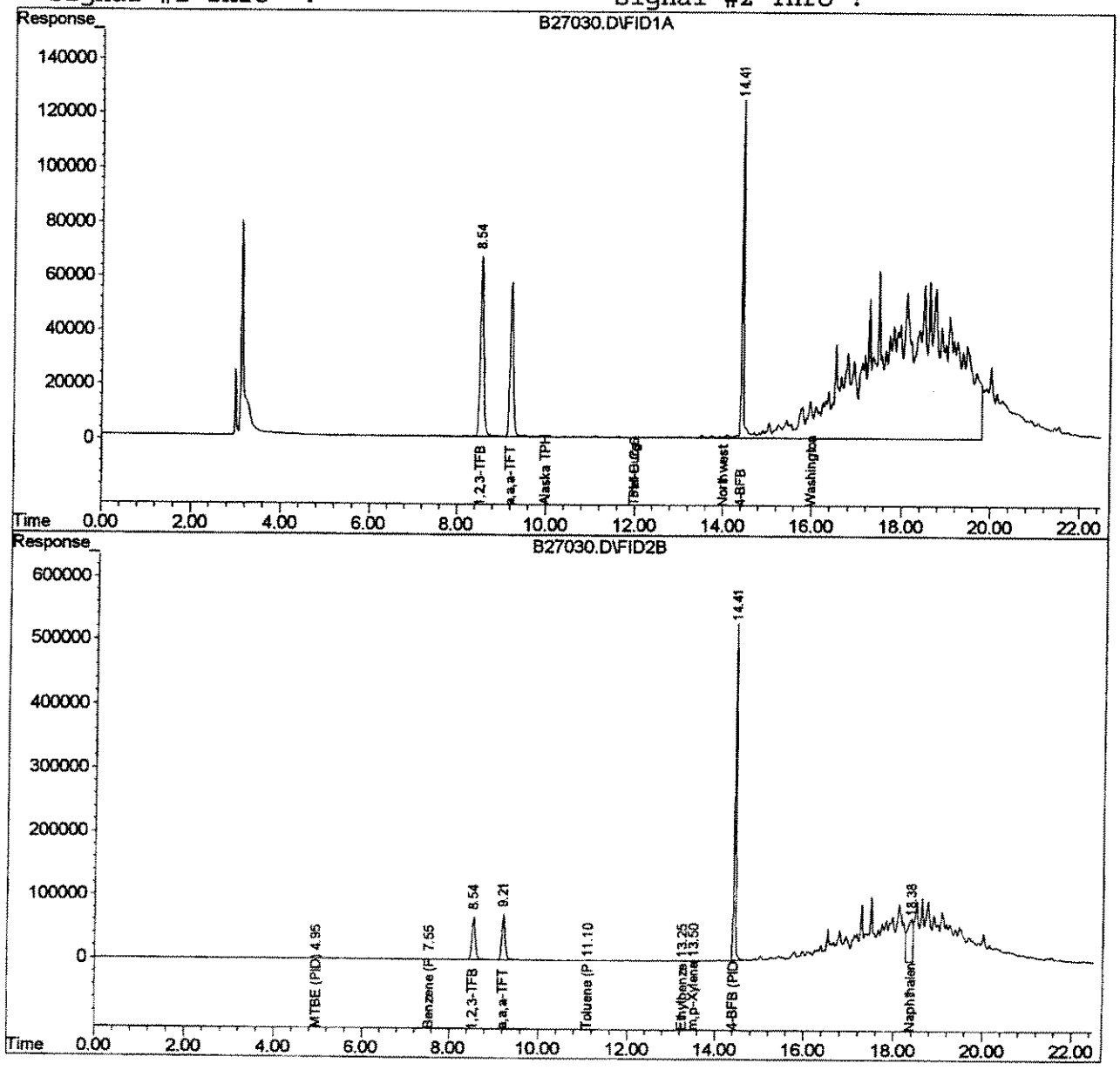


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27030.D\FID1A.CH Vial: 30
Signal #2 : D:\HPCHEM\3\DATA\022705\B27030.D\FID2B.CH
Acq On : 28 Feb 2005 2:00 Operator: aa
Sample : b5b0435-21 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 2 15:20 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

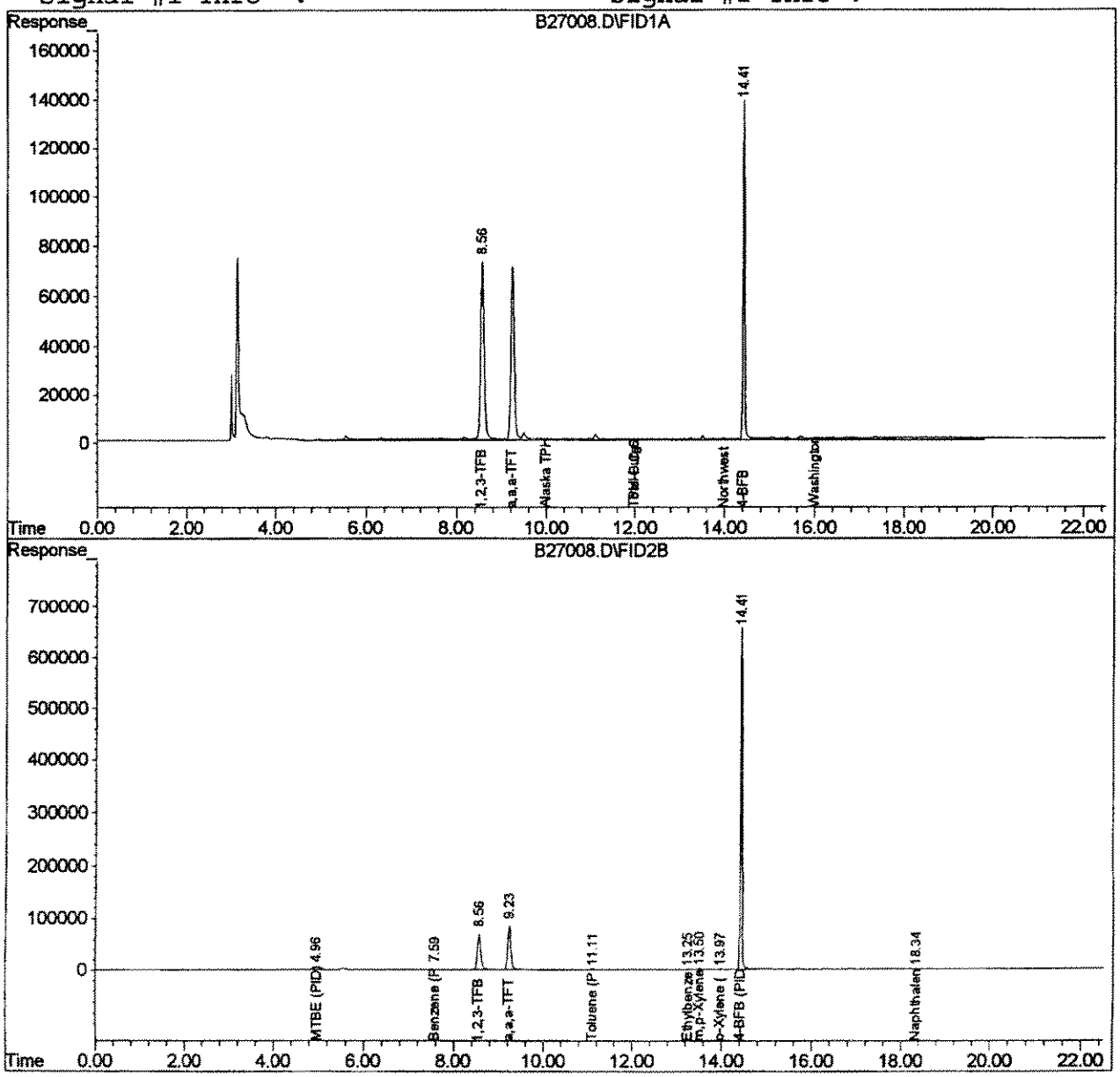


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27008.D\FID1A.CH Vial: 8
Signal #2 : D:\HPCHEM\3\DATA\022705\B27008.D\FID2B.CH
Acq On : 27 Feb 2005 15:11 Operator: aa
Sample : b5b0435-22 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 15:34 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

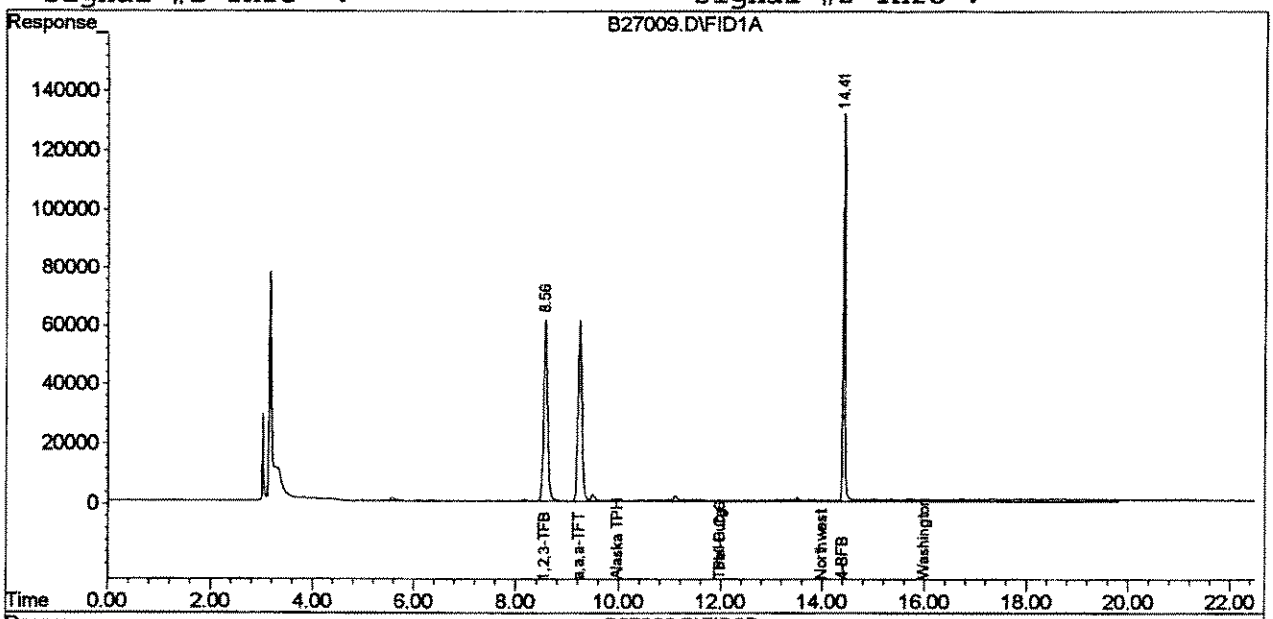


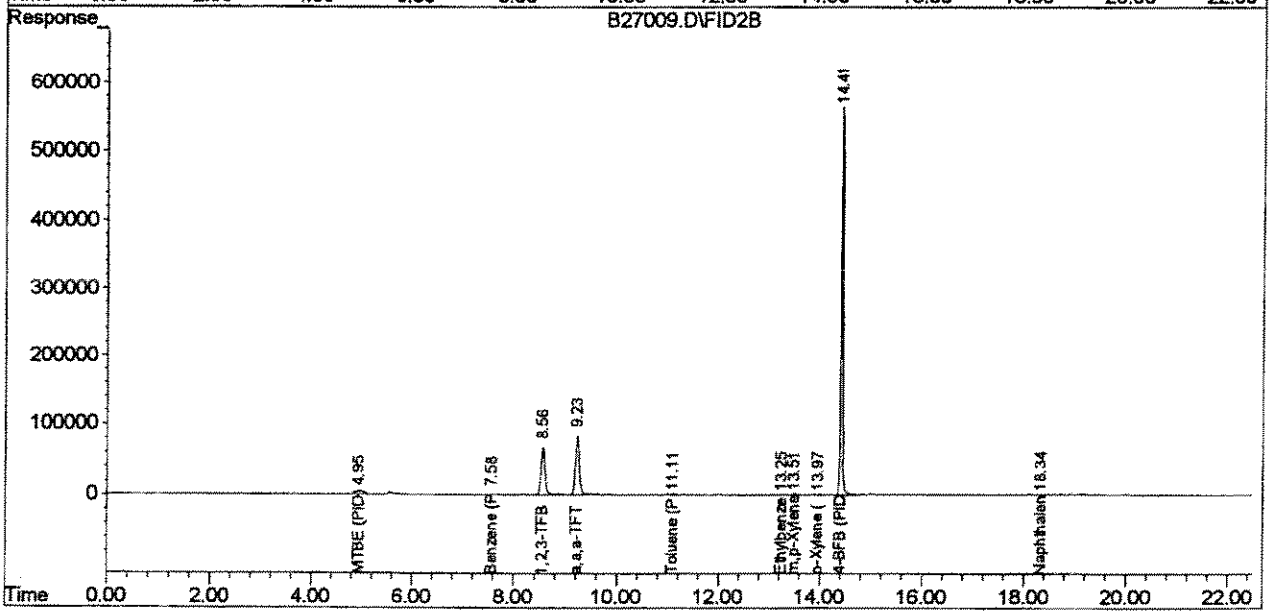
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27009.D\FID1A.CH Vial: 9
Signal #2 : D:\HPCHEM\3\DATA\022705\B27009.D\FID2B.CH
Acq On : 27 Feb 2005 15:40 Operator: aa
Sample : b5b0435-23 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 16:03 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



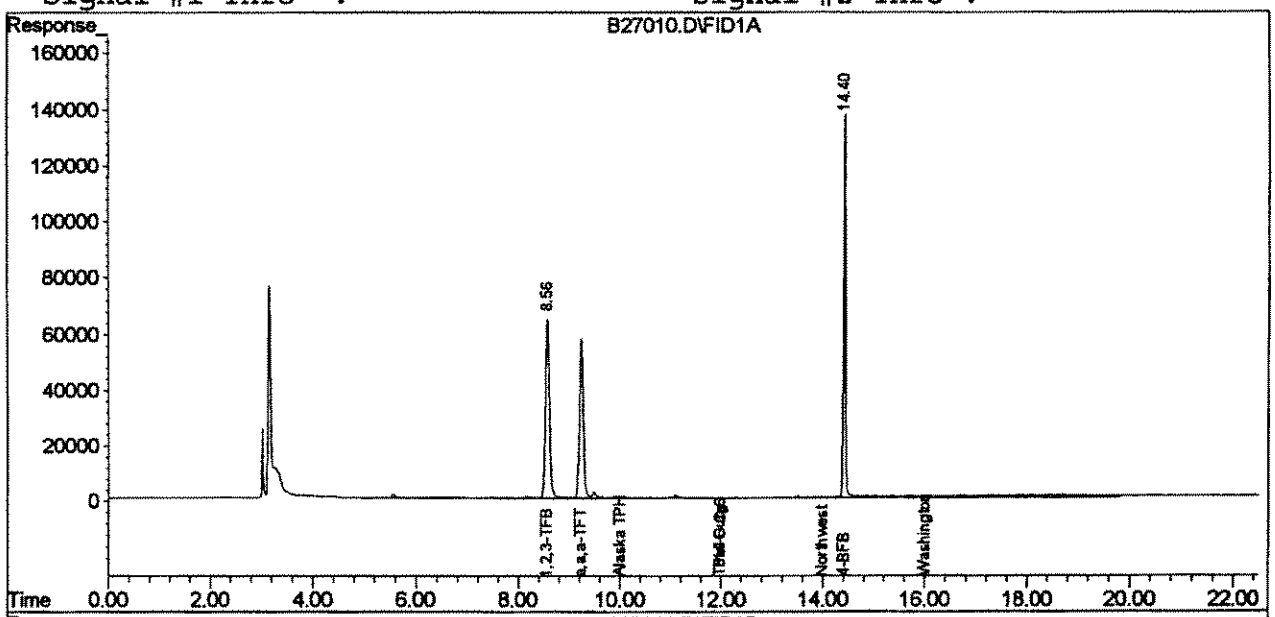


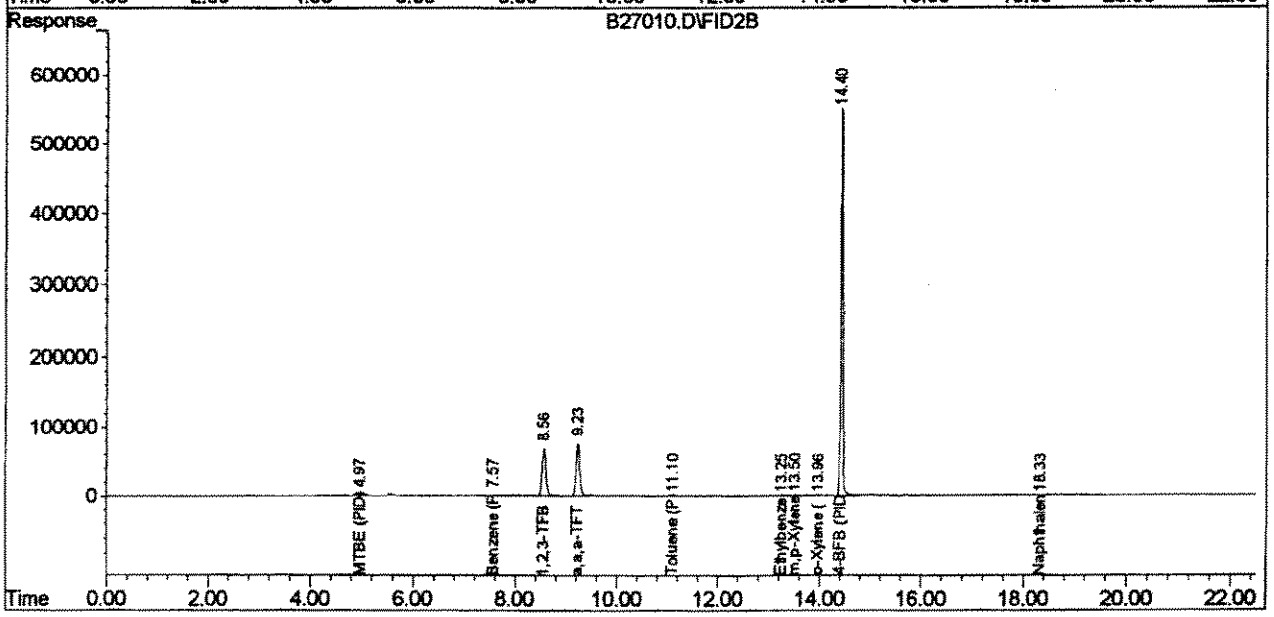
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27010.D\FID1A.CH Vial: 10
Signal #2 : D:\HPCHEM\3\DATA\022705\B27010.D\FID2B.CH
Acq On : 27 Feb 2005 16:10 Operator: aa
Sample : b5b0435-24 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 16:33 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



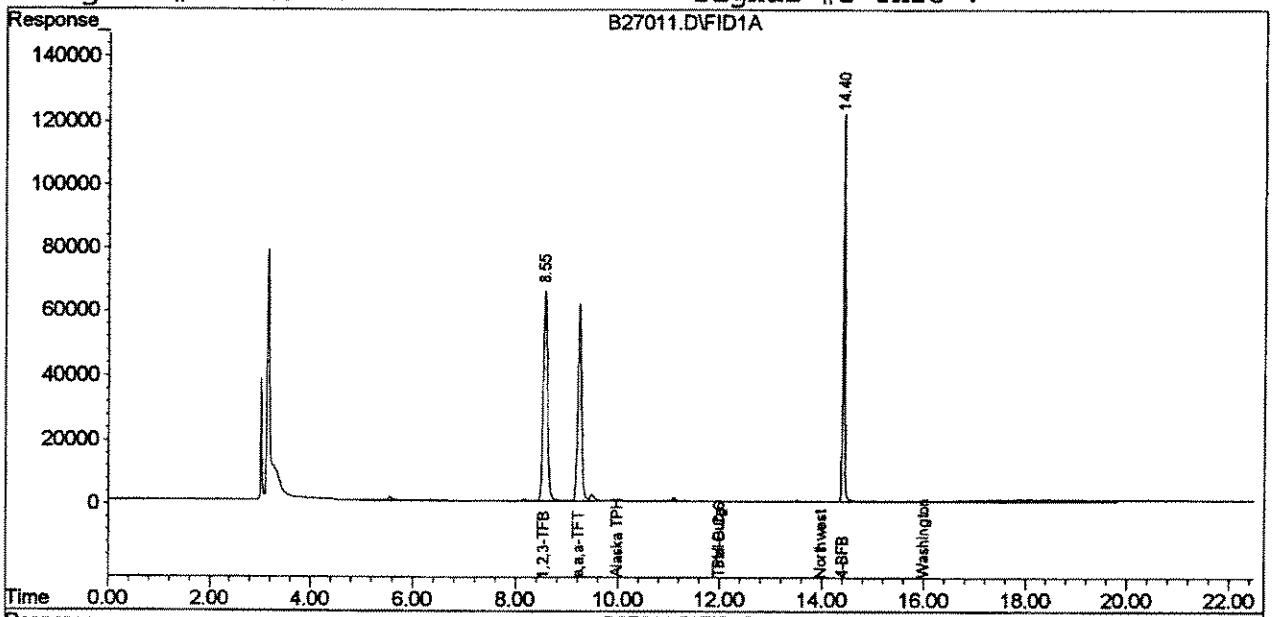


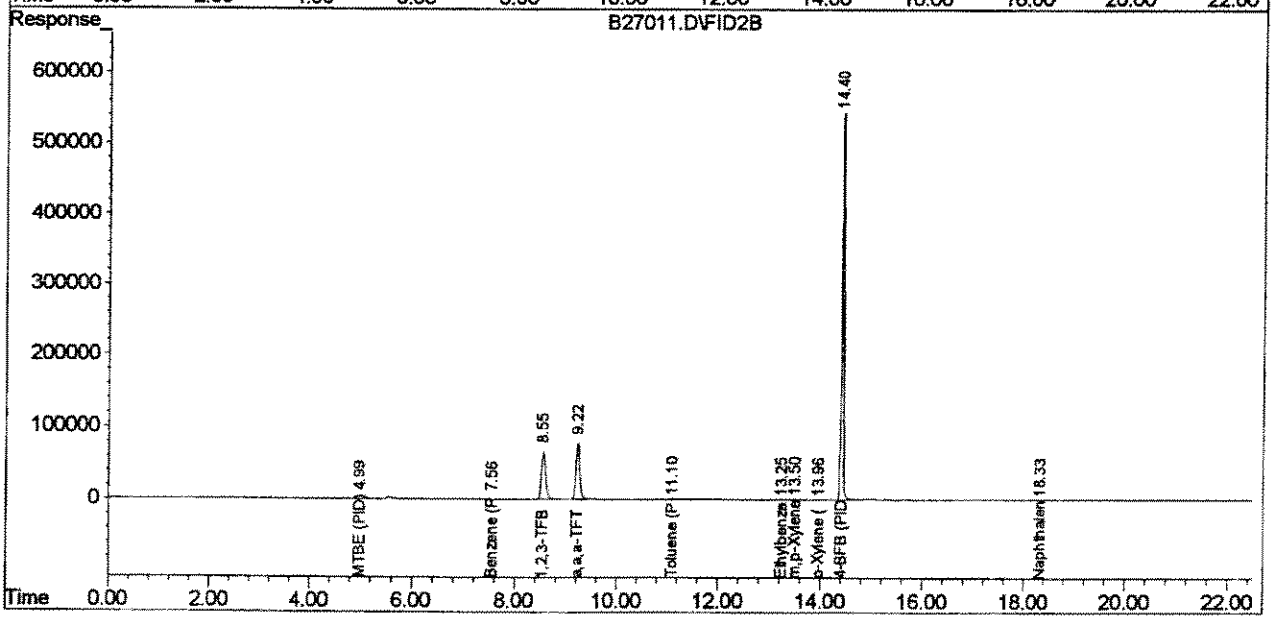
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27011.D\FID1A.CH Vial: 11
Signal #2 : D:\HPCHEM\3\DATA\022705\B27011.D\FID2B.CH
Acq On : 27 Feb 2005 16:40 Operator: aa
Sample : b5b0435-25 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 17:03 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



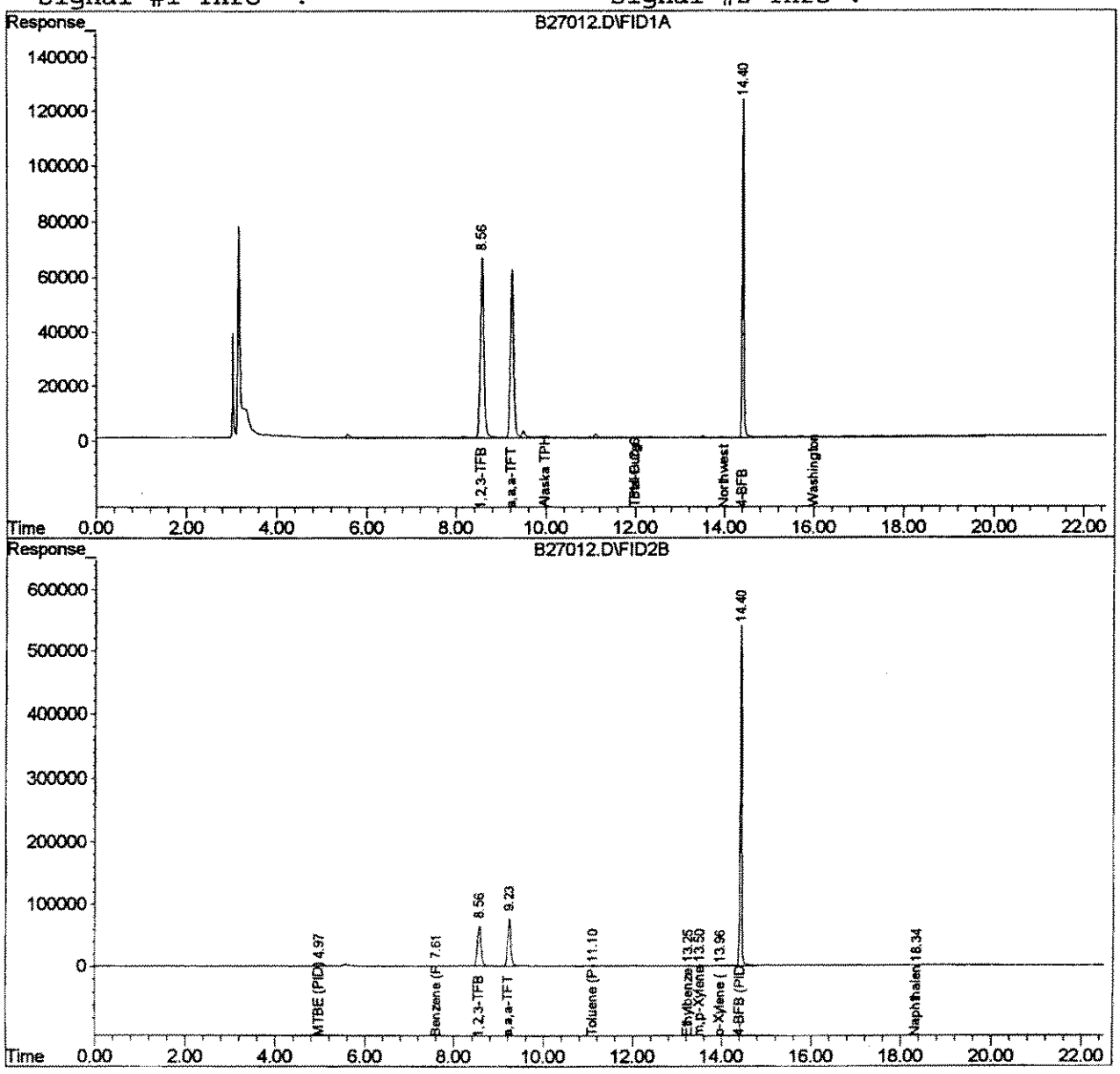


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27012.D\FID1A.CH Vial: 12
Signal #2 : D:\HPCHEM\3\DATA\022705\B27012.D\FID2B.CH
Acq On : 27 Feb 2005 17:09 Operator: aa
Sample : b5b0435-26 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 17:32 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

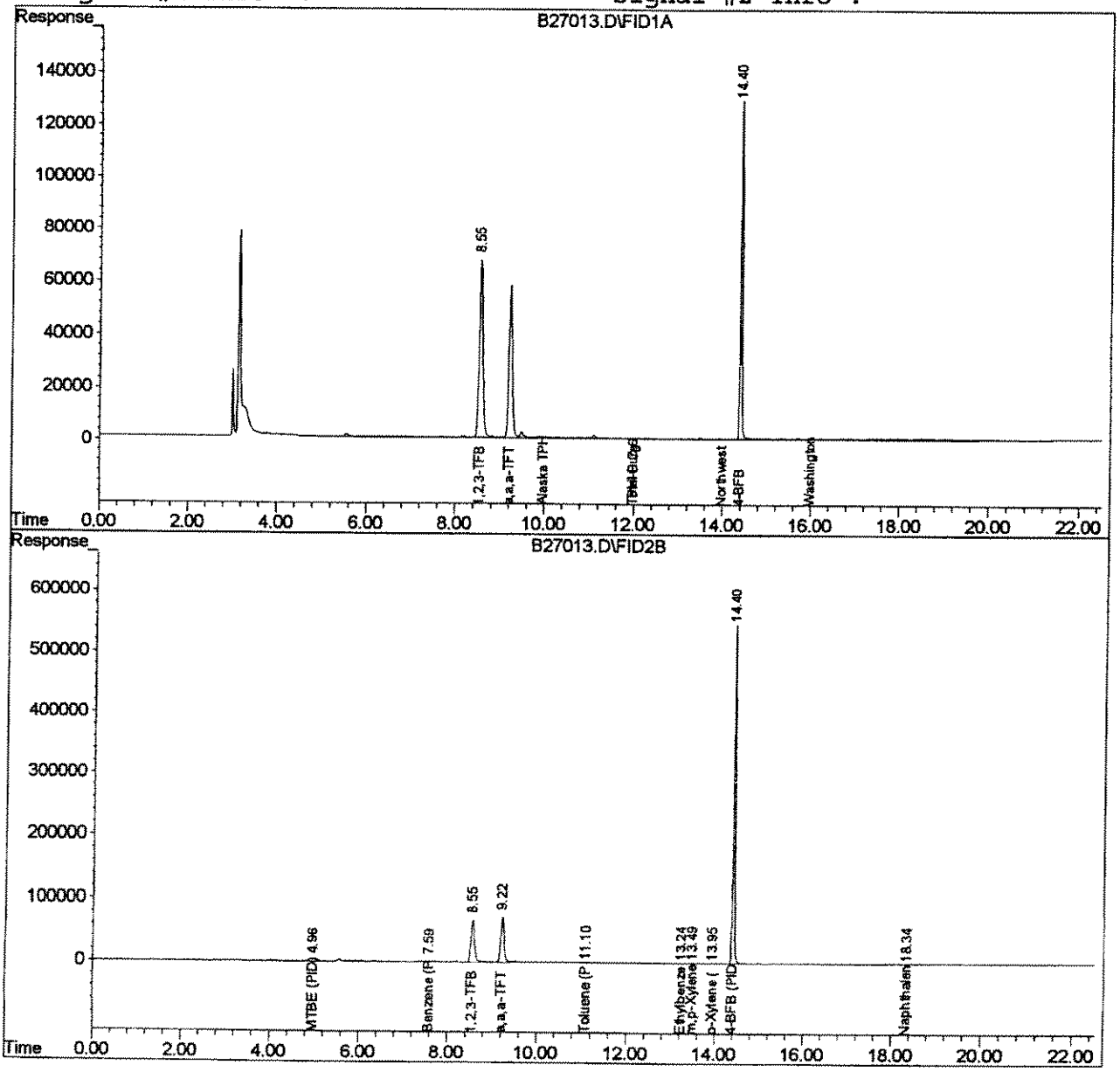


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27013.D\FID1A.CH Vial: 13
Signal #2 : D:\HPCHEM\3\DATA\022705\B27013.D\FID2B.CH
Acq On : 27 Feb 2005 17:39 Operator: aa
Sample : b5b0435-27 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 27 18:02 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Feb 27 12:58:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

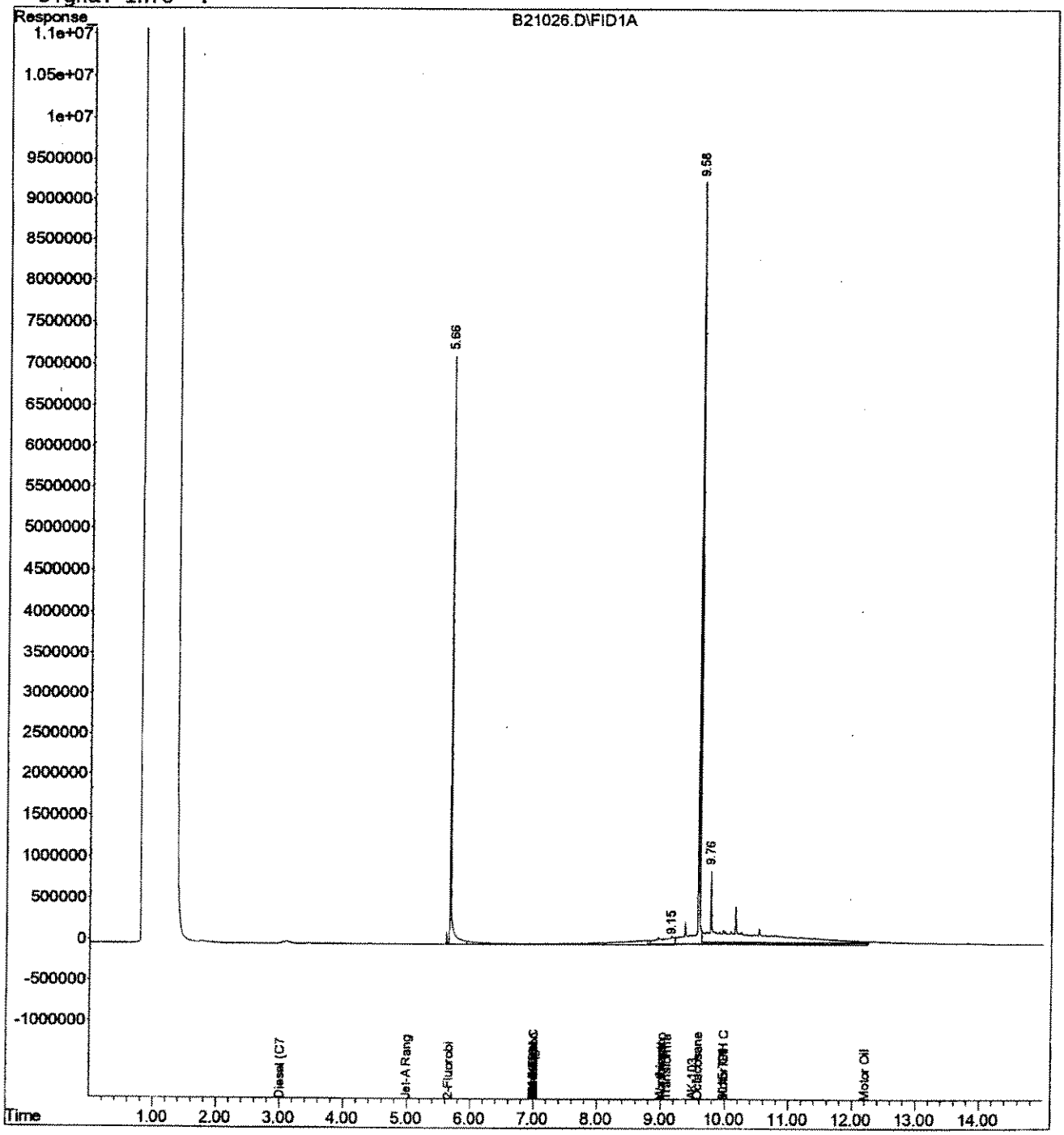


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21026.D Vial: 12
Acq On : 21 Feb 2005 13:55 Operator: GSM
Sample : b5b0435-01 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 14:10 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

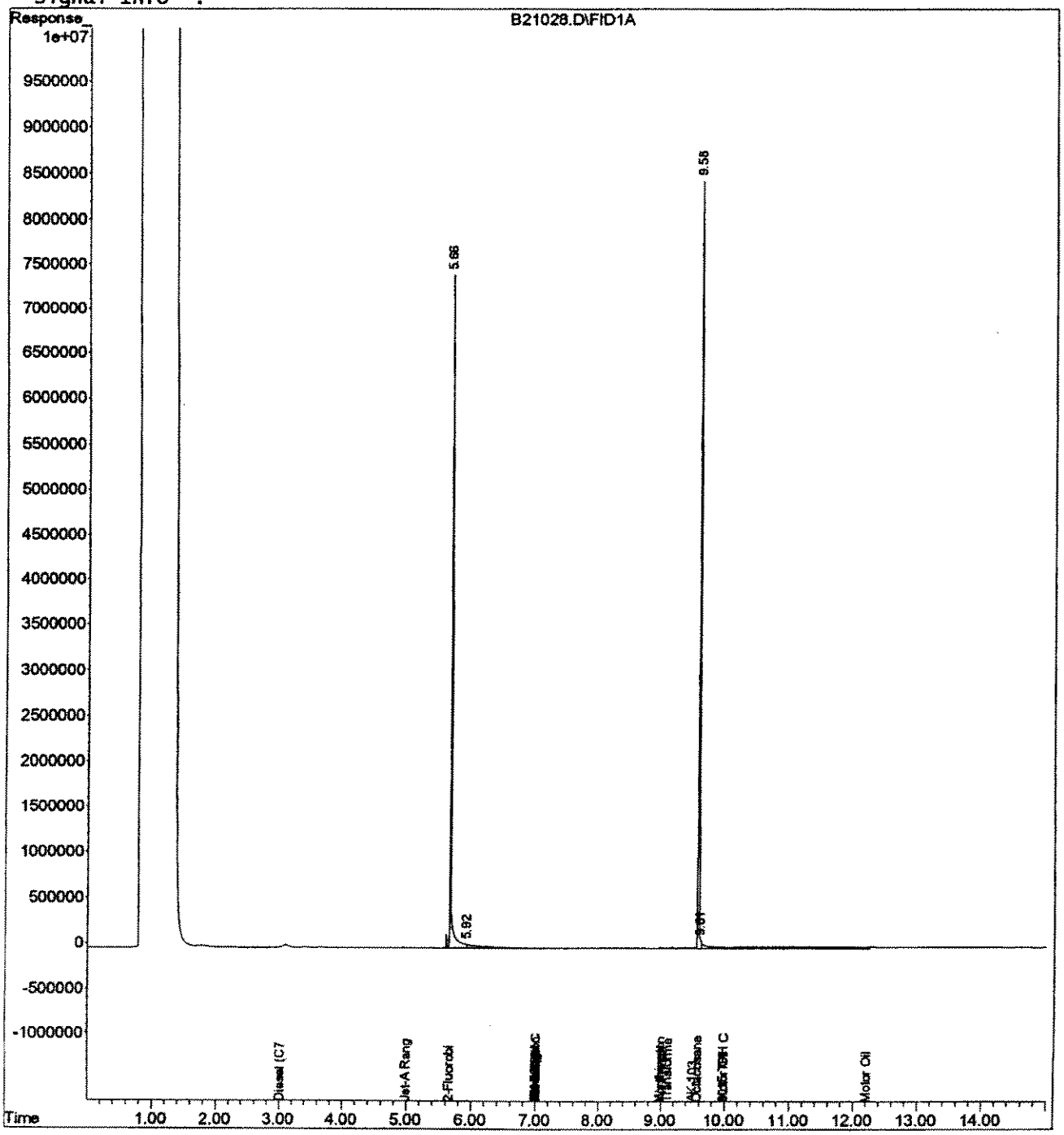


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21028.D Vial: 13
Acq On : 21 Feb 2005 14:18 Operator: GSM
Sample : b5b0435-02 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 14:33 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

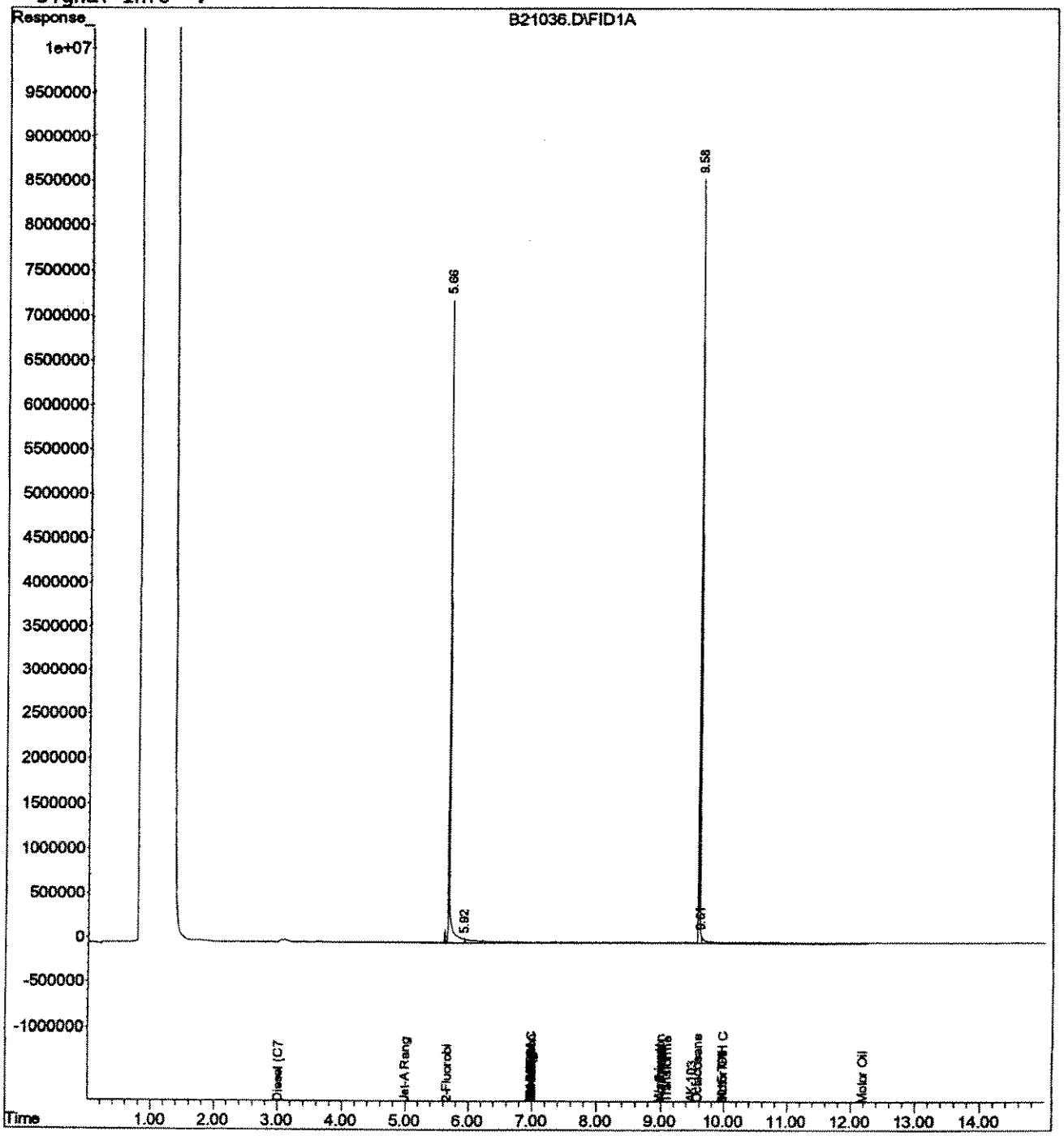


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21036.D Vial: 14
Acq On : 21 Feb 2005 16:09 Operator: GSM
Sample : b5b0435-03 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 16:24 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

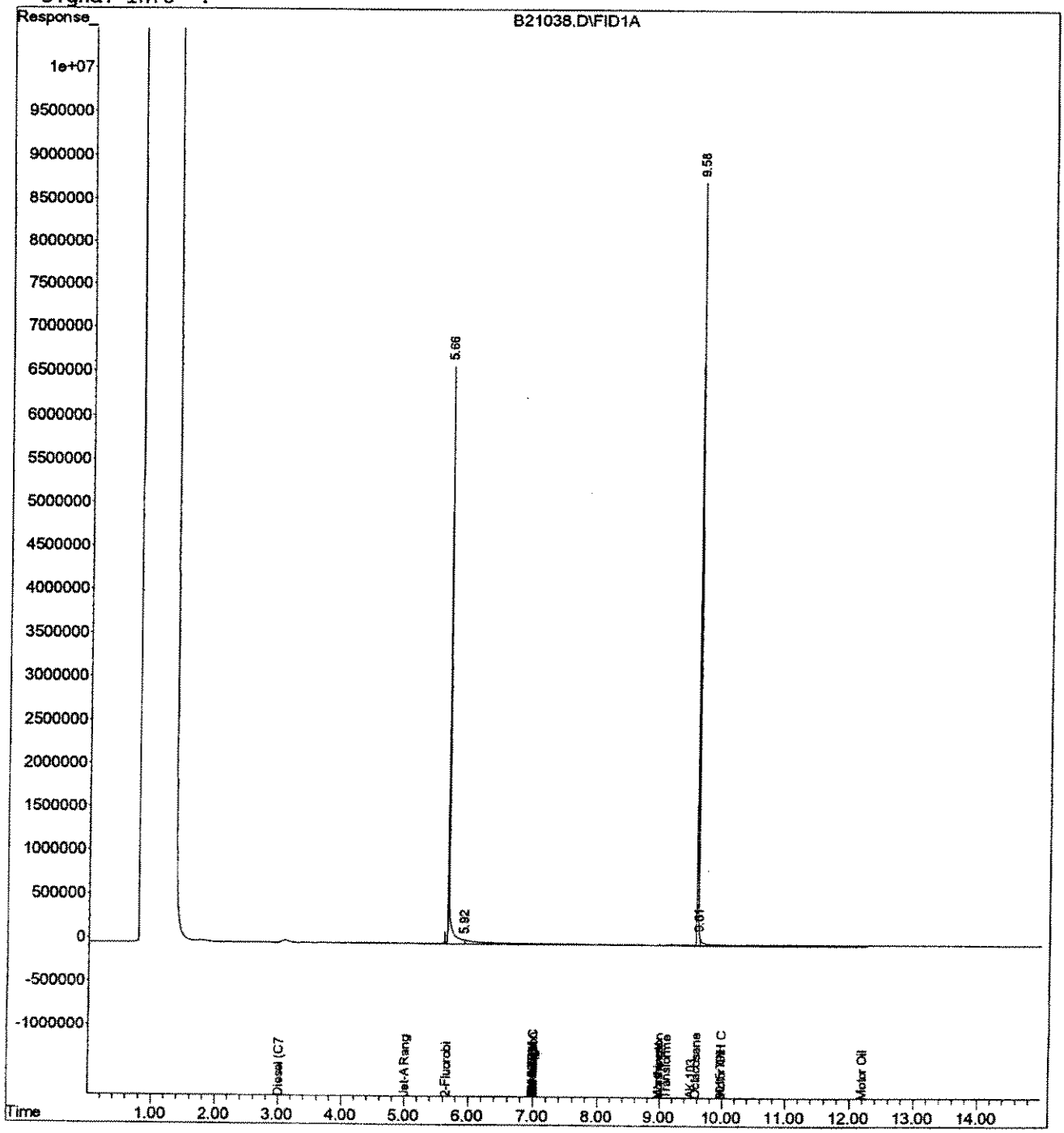


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21038.D Vial: 15
Acq On : 21 Feb 2005 16:32 Operator: GSM
Sample : b5b0435-04 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 16:47 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

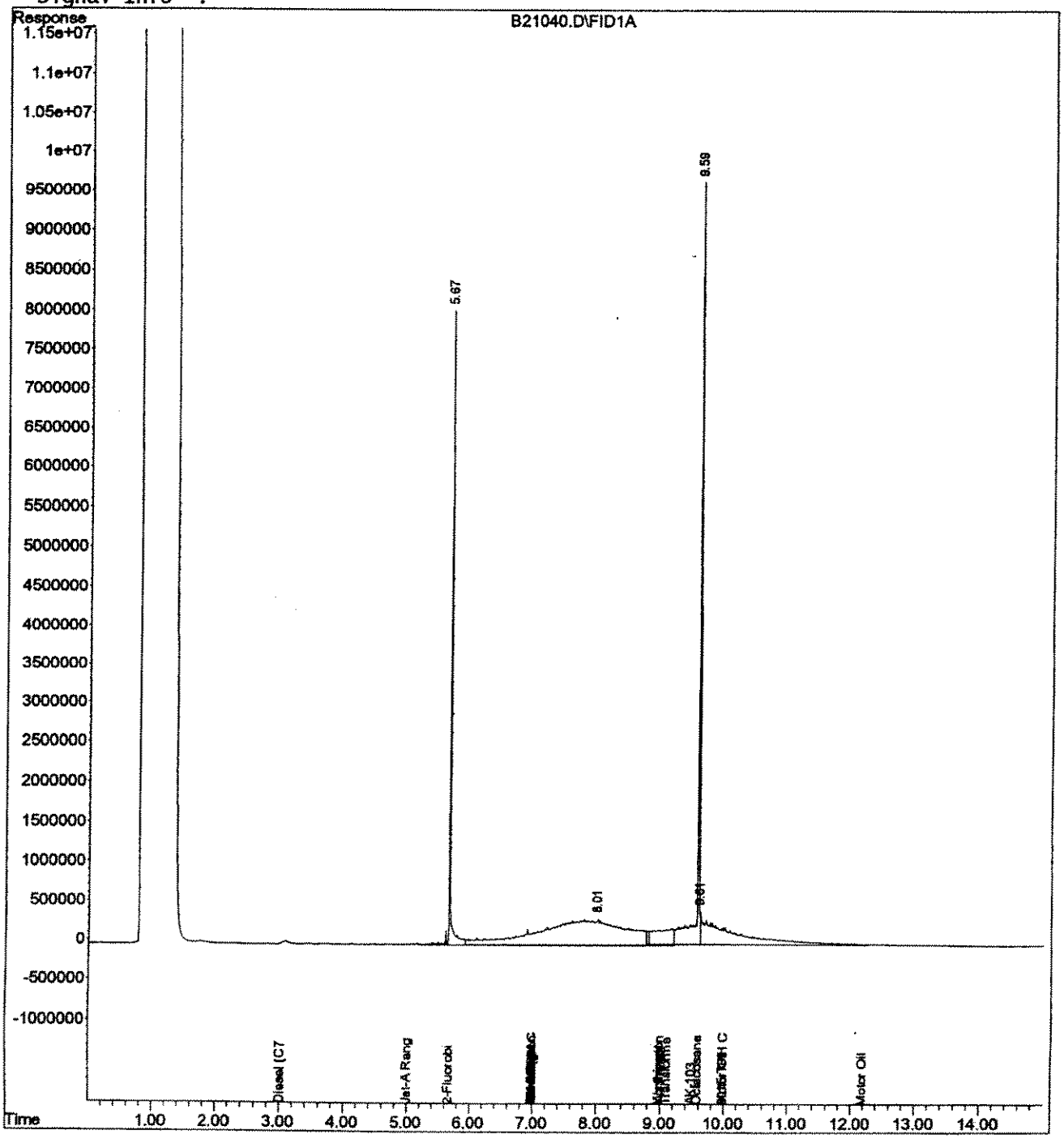


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21040.D Vial: 16
Acq On : 21 Feb 2005 16:55 Operator: GSM
Sample : b5b0435-05 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 17:11 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

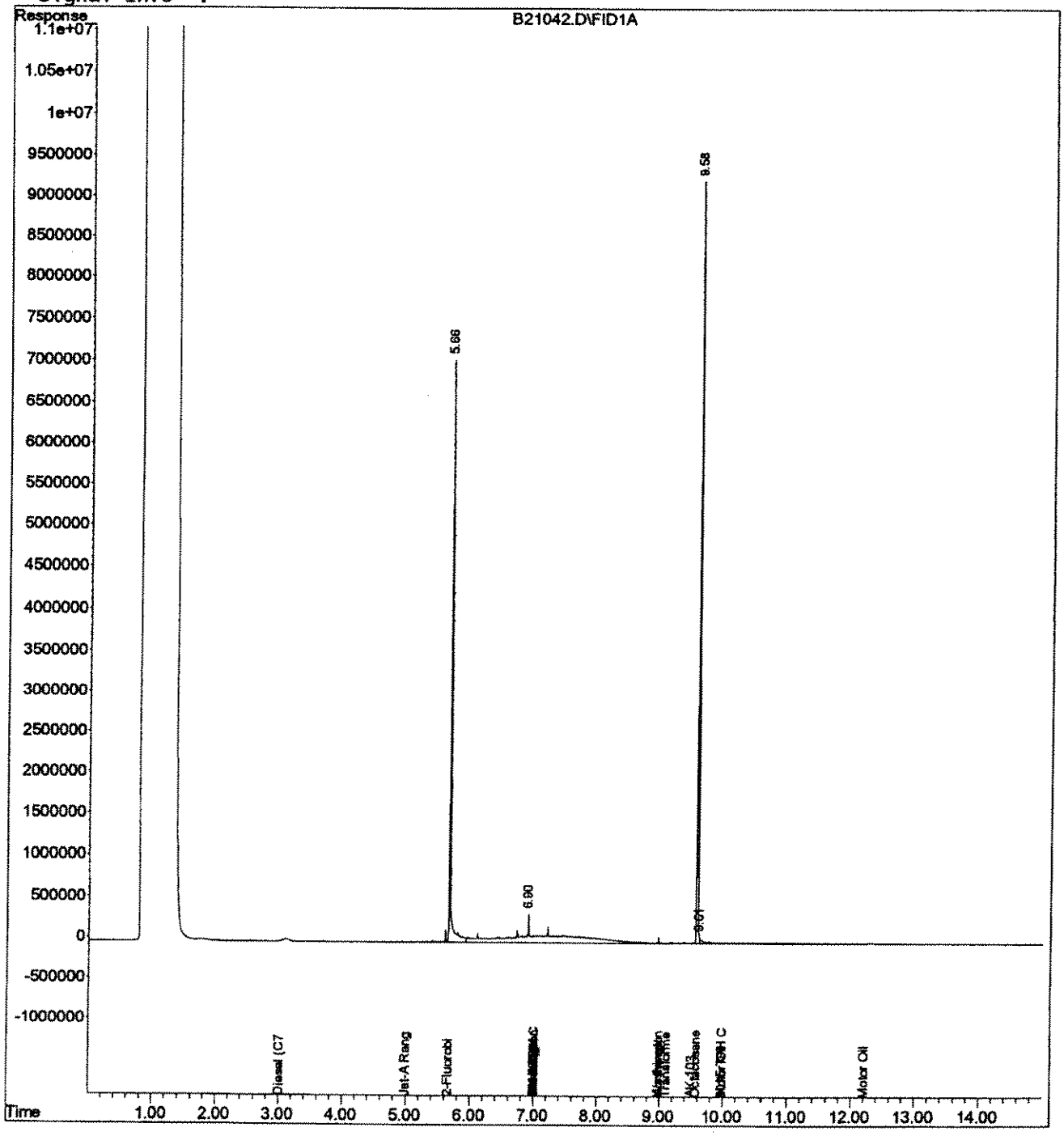


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21042.D Vial: 17
Acq On : 21 Feb 2005 17:19 Operator: GSM
Sample : b5b0435-06 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 17:34 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

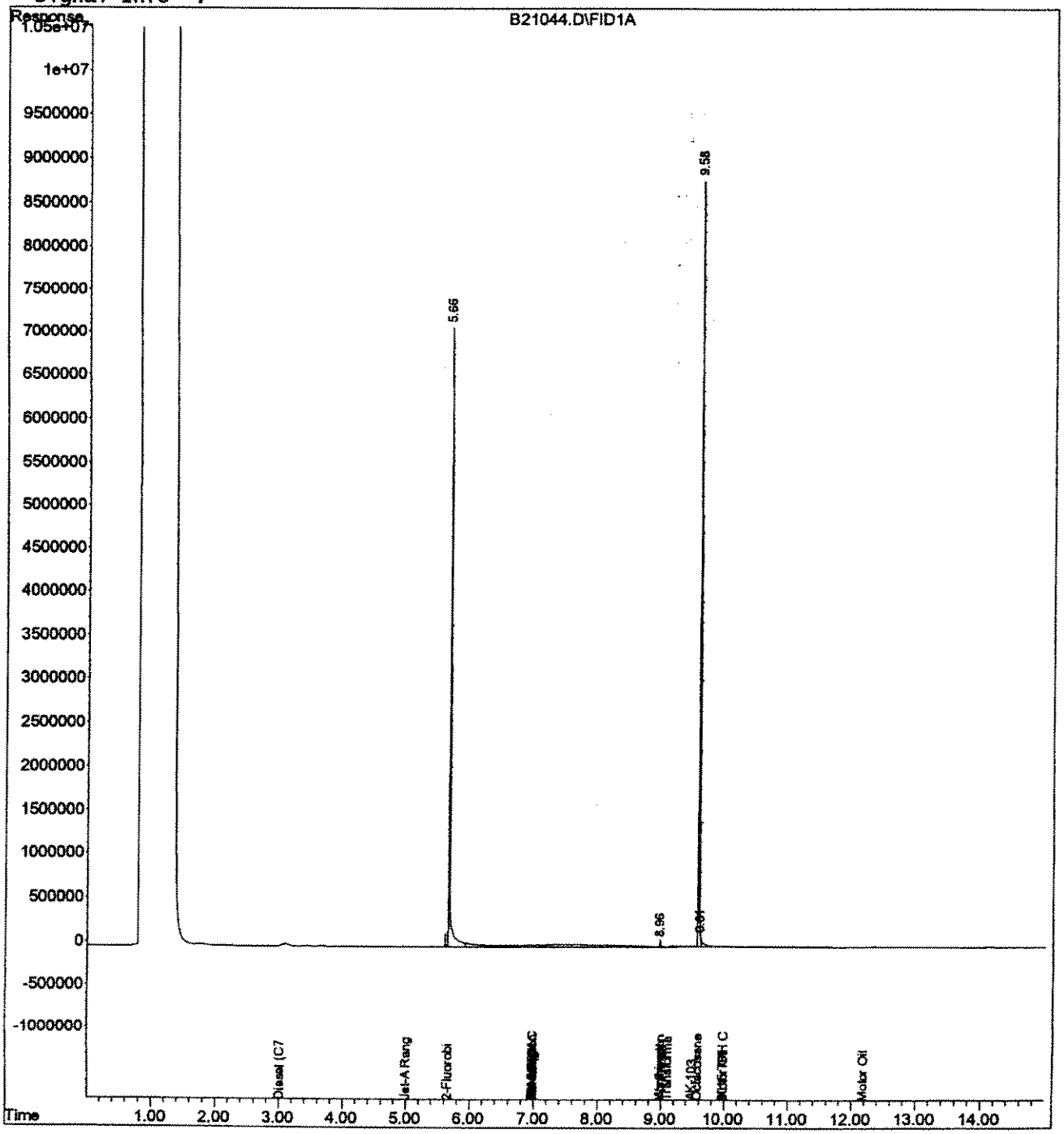


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21044.D Vial: 18
Acq On : 21 Feb 2005 17:42 Operator: GSM
Sample : b5b0435-07 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 21 17:57 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)
Title : TPH-D Front
Last Update : Tue Feb 15 19:44:58 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

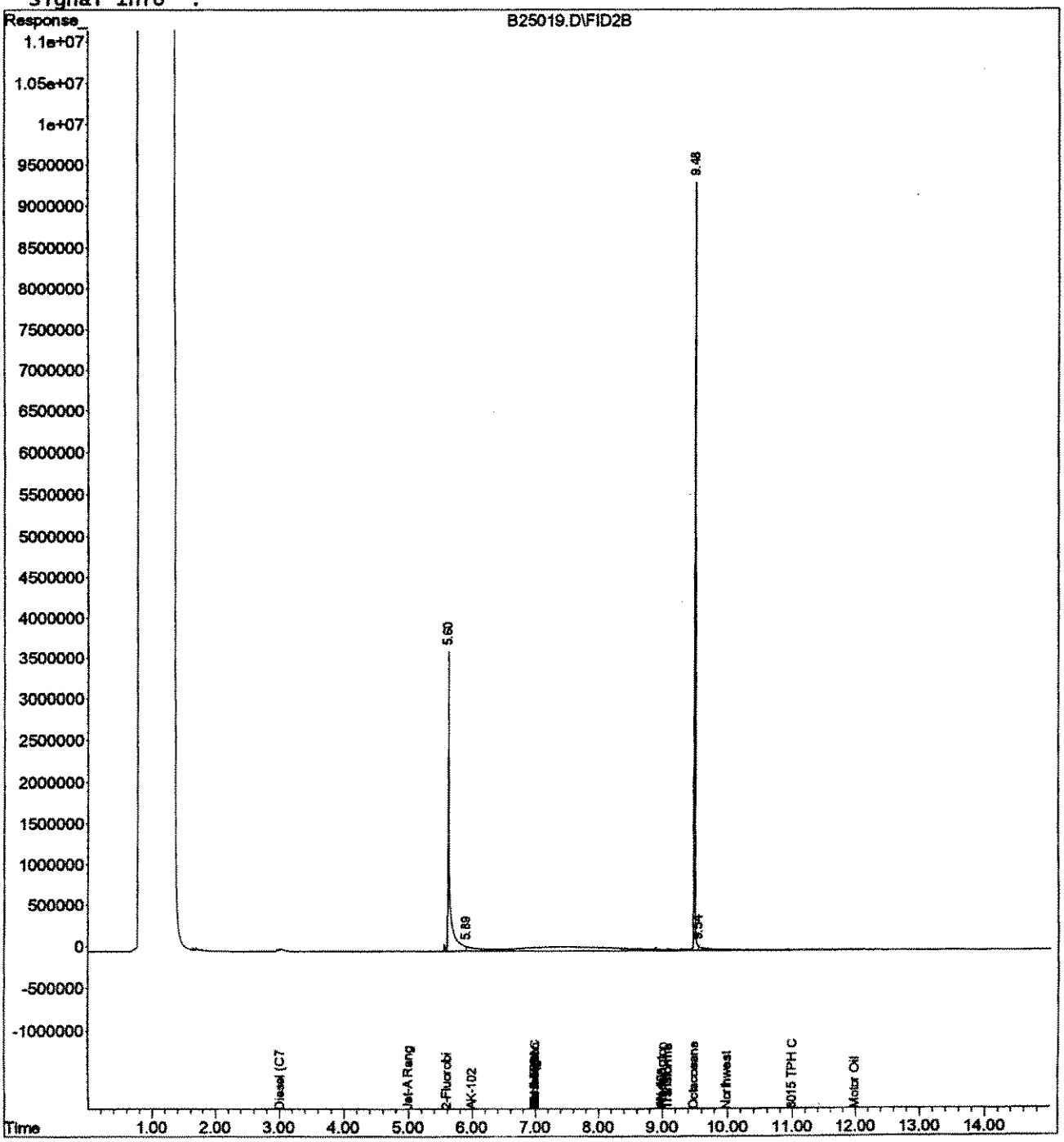


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25019.D Vial: 17
Acq On : 25 Feb 2005 12:36 Operator: GSM
Sample : b5b0435-08 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 12:52 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

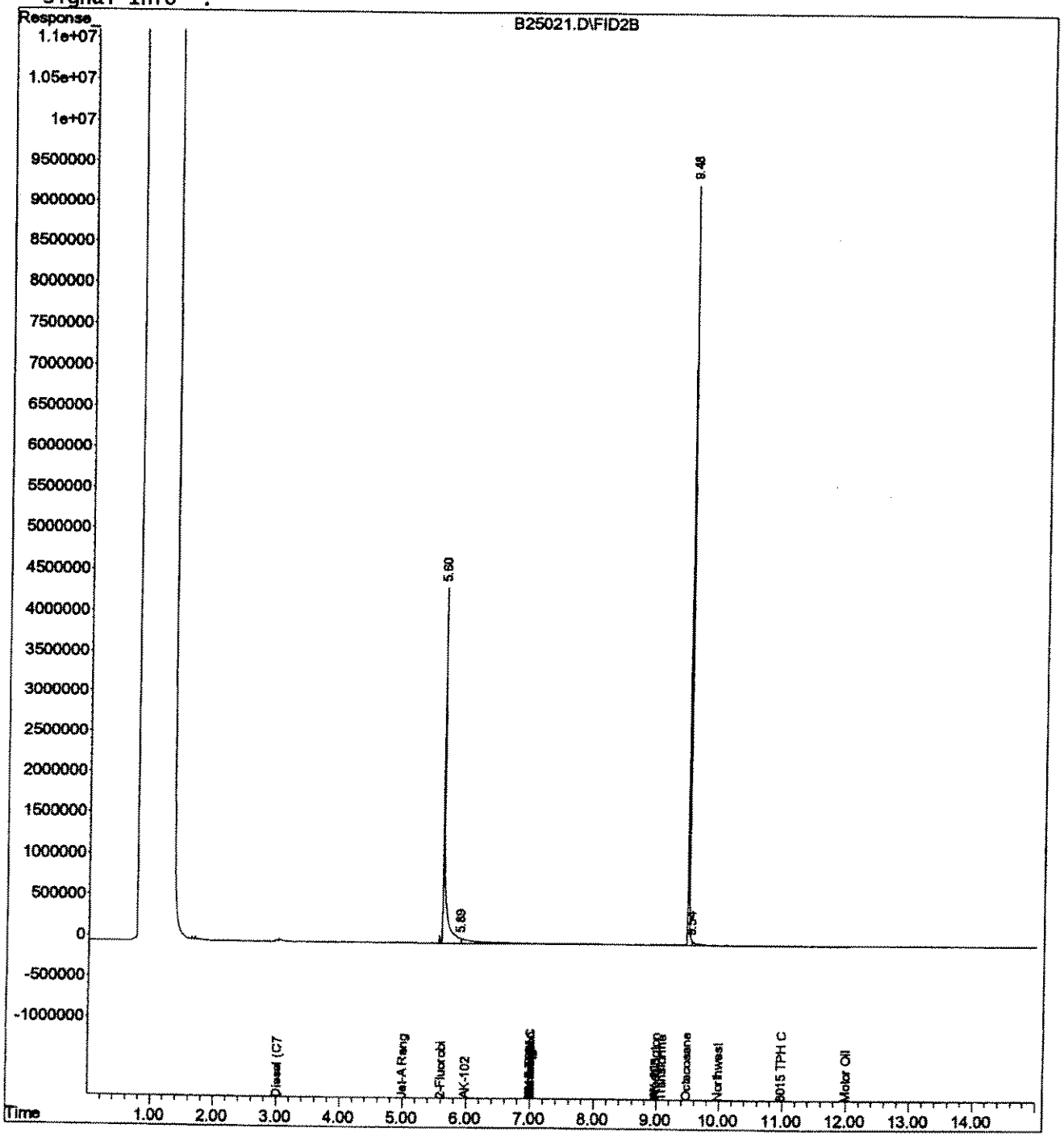


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25021.D Vial: 18
Acq On : 25 Feb 2005 12:59 Operator: GSM
Sample : b5b0435-09 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 13:15 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

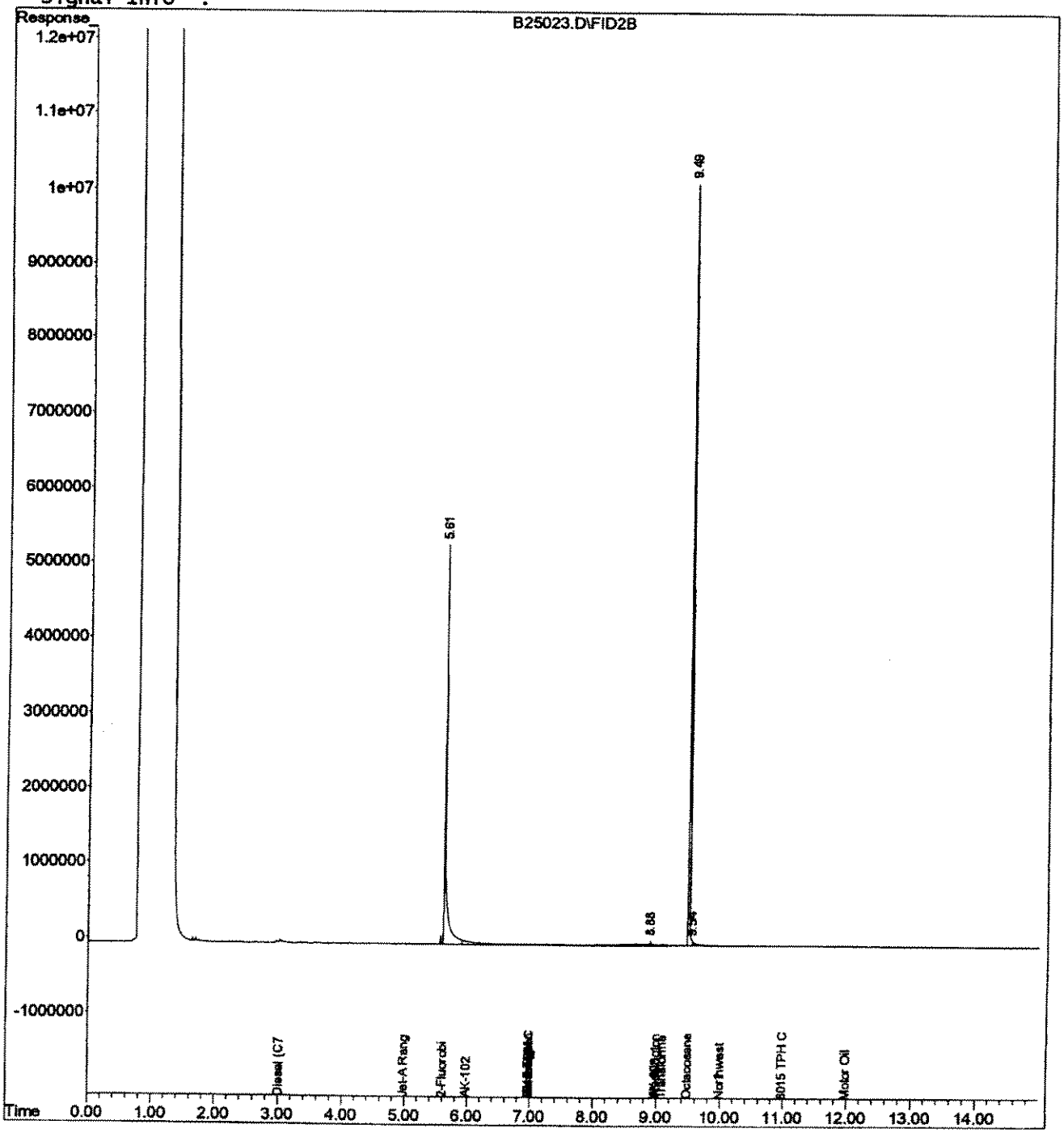


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25023.D Vial: 19
Acq On : 25 Feb 2005 13:23 Operator: GSM
Sample : b5b0435-10 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 13:38 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

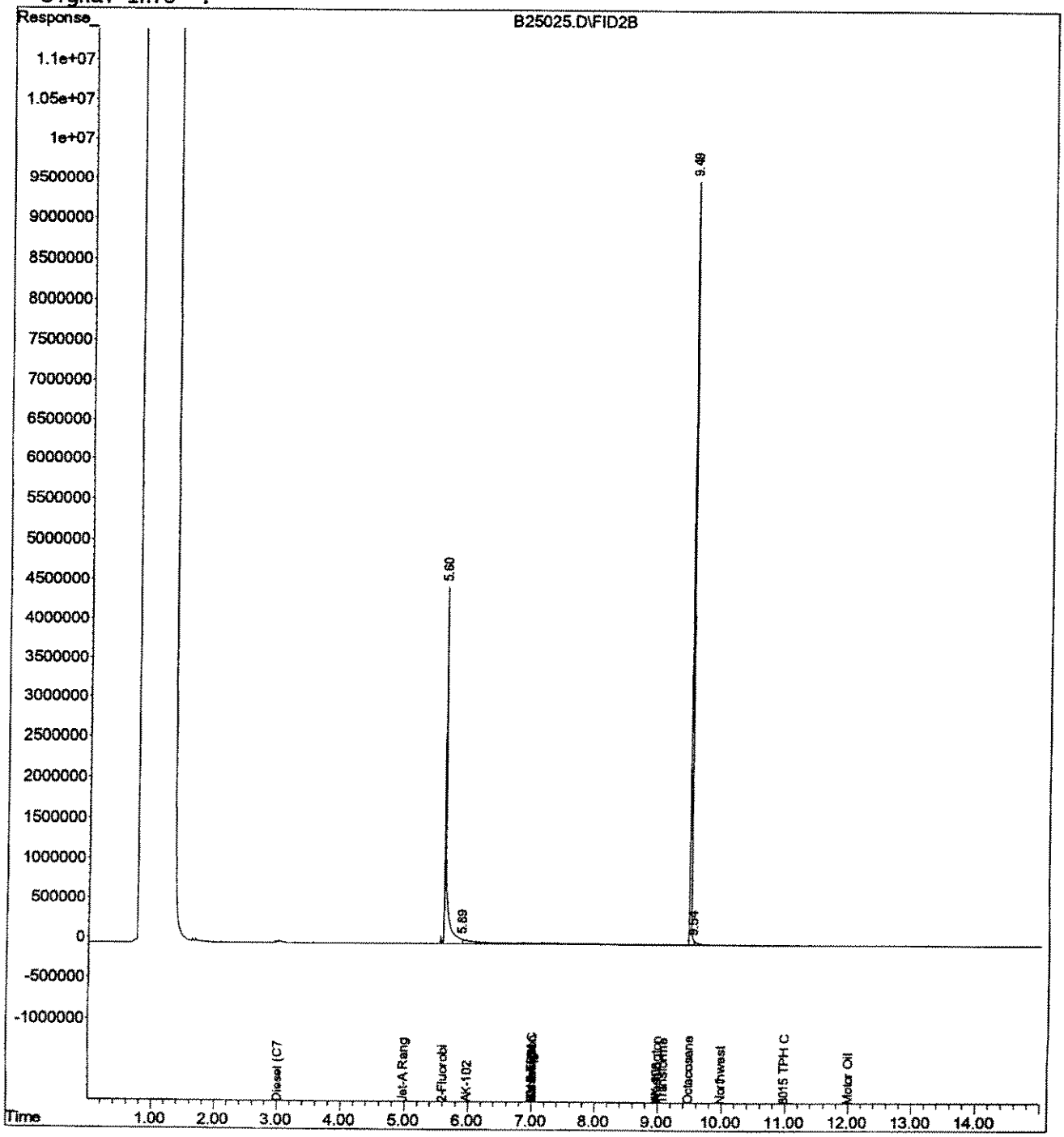


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25025.D Vial: 20
Acq On : 25 Feb 2005 13:46 Operator: GSM
Sample : b5b0435-11 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 14:02 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

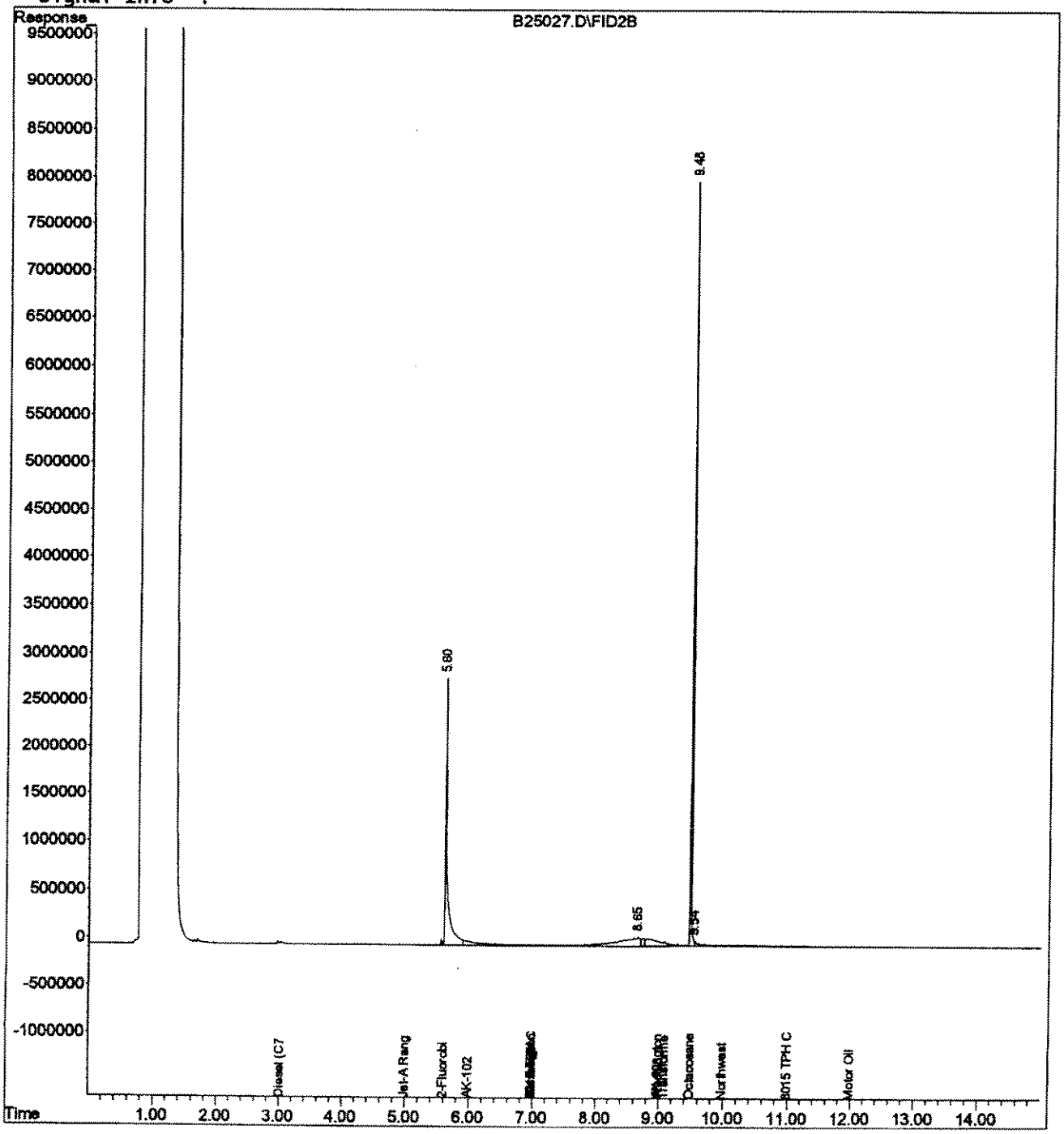


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25027.D Vial: 21
Acq On : 25 Feb 2005 14:09 Operator: GSM
Sample : b5b0435-12 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 14:25 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

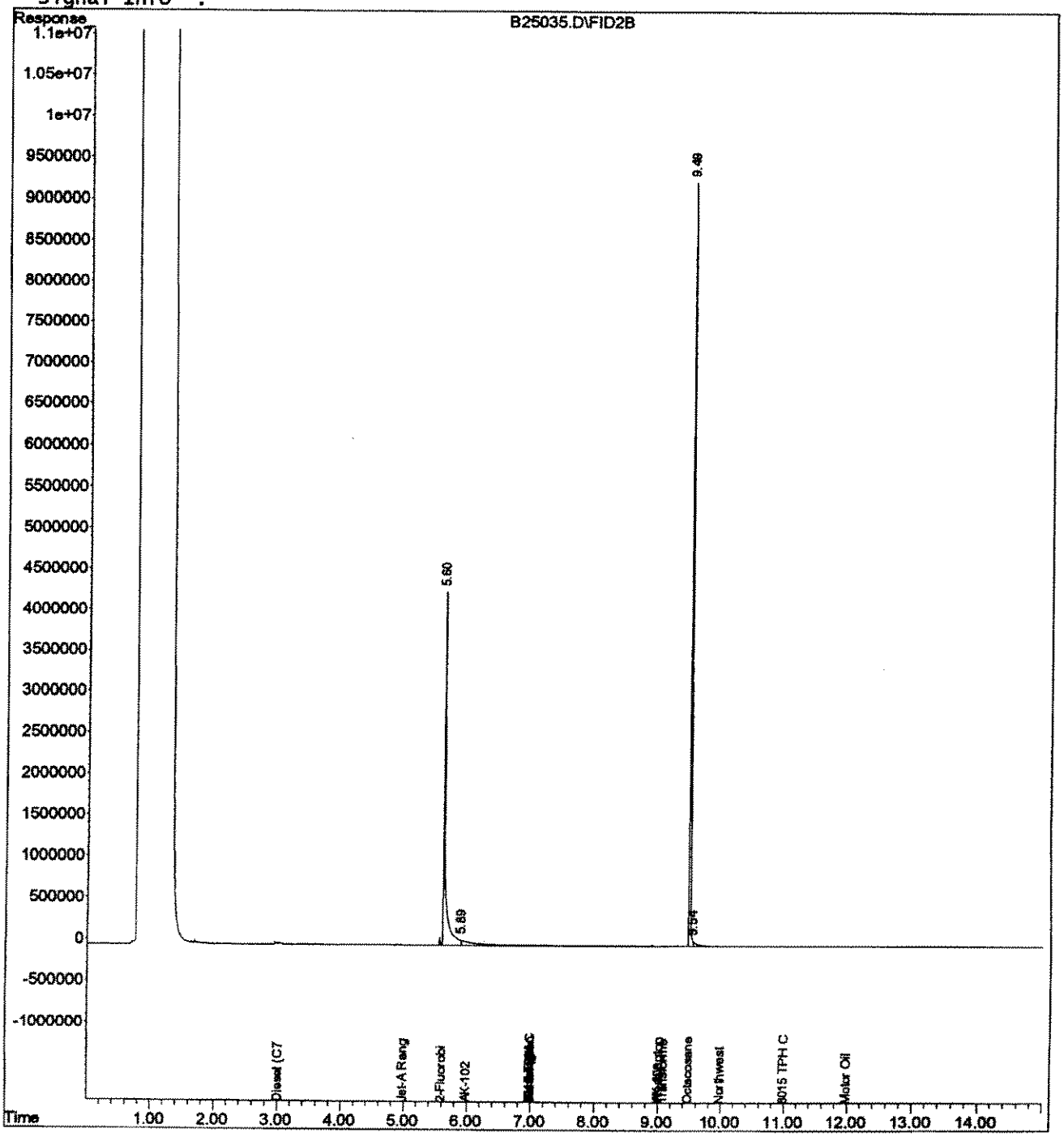


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25035.D Vial: 22
Acq On : 25 Feb 2005 15:51 Operator: GSM
Sample : b5b0435-13 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 16:06 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

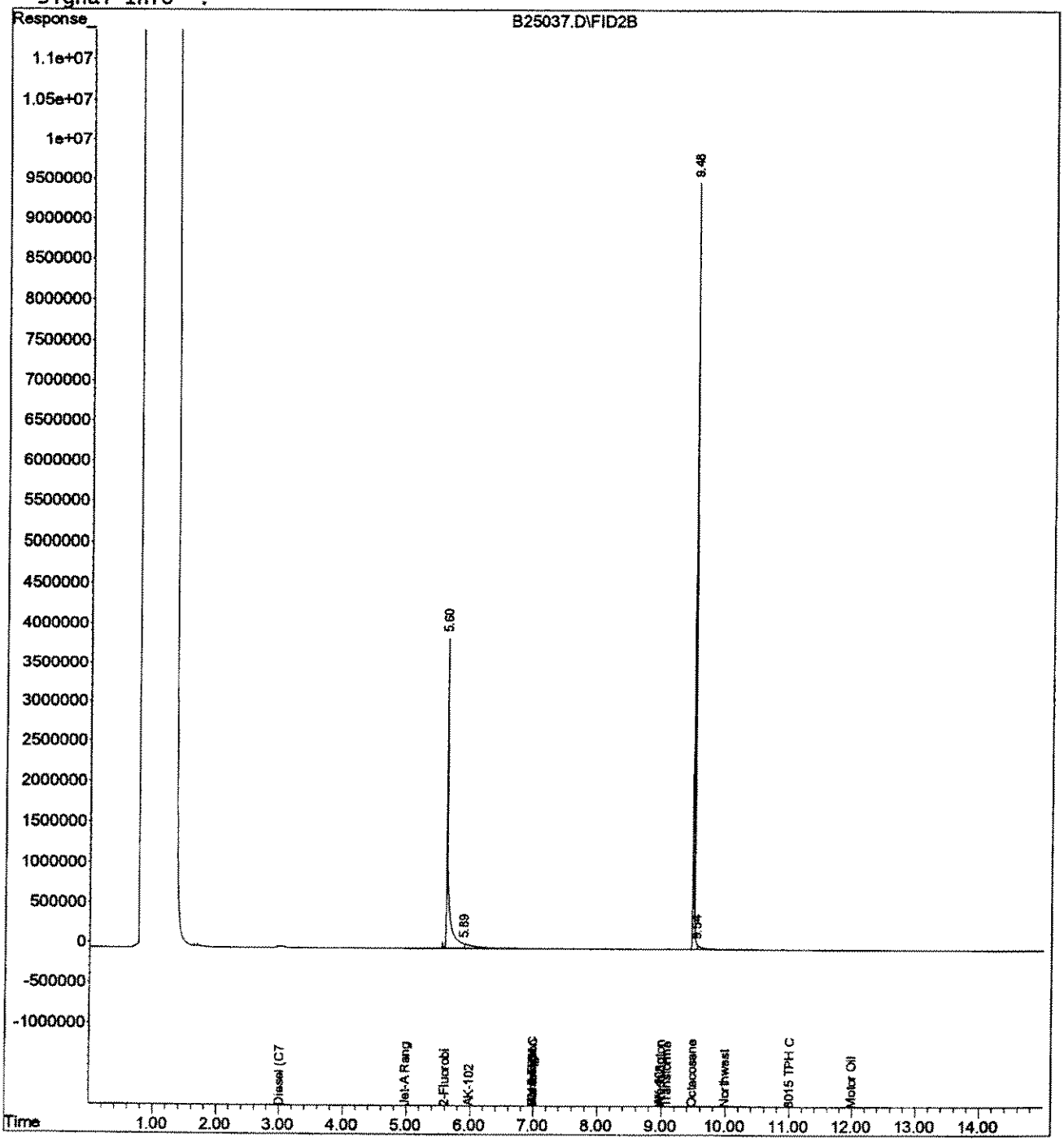


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25037.D Vial: 23
Acq On : 25 Feb 2005 16:14 Operator: GSM
Sample : b5b0435-14 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 16:30 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

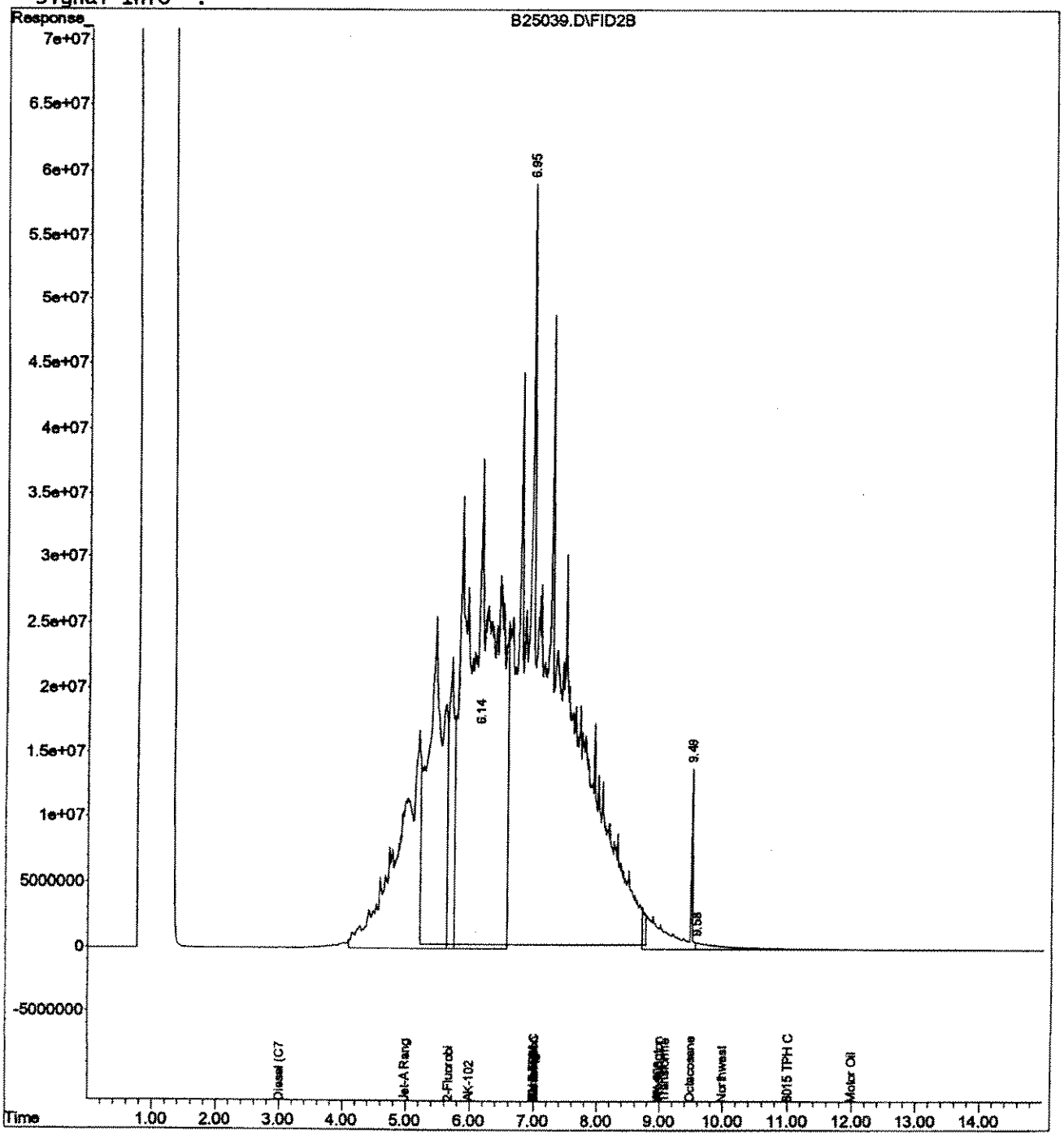


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25039.D Vial: 24
Acq On : 25 Feb 2005 16:38 Operator: GSM
Sample : b5b0435-15 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 16:53 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

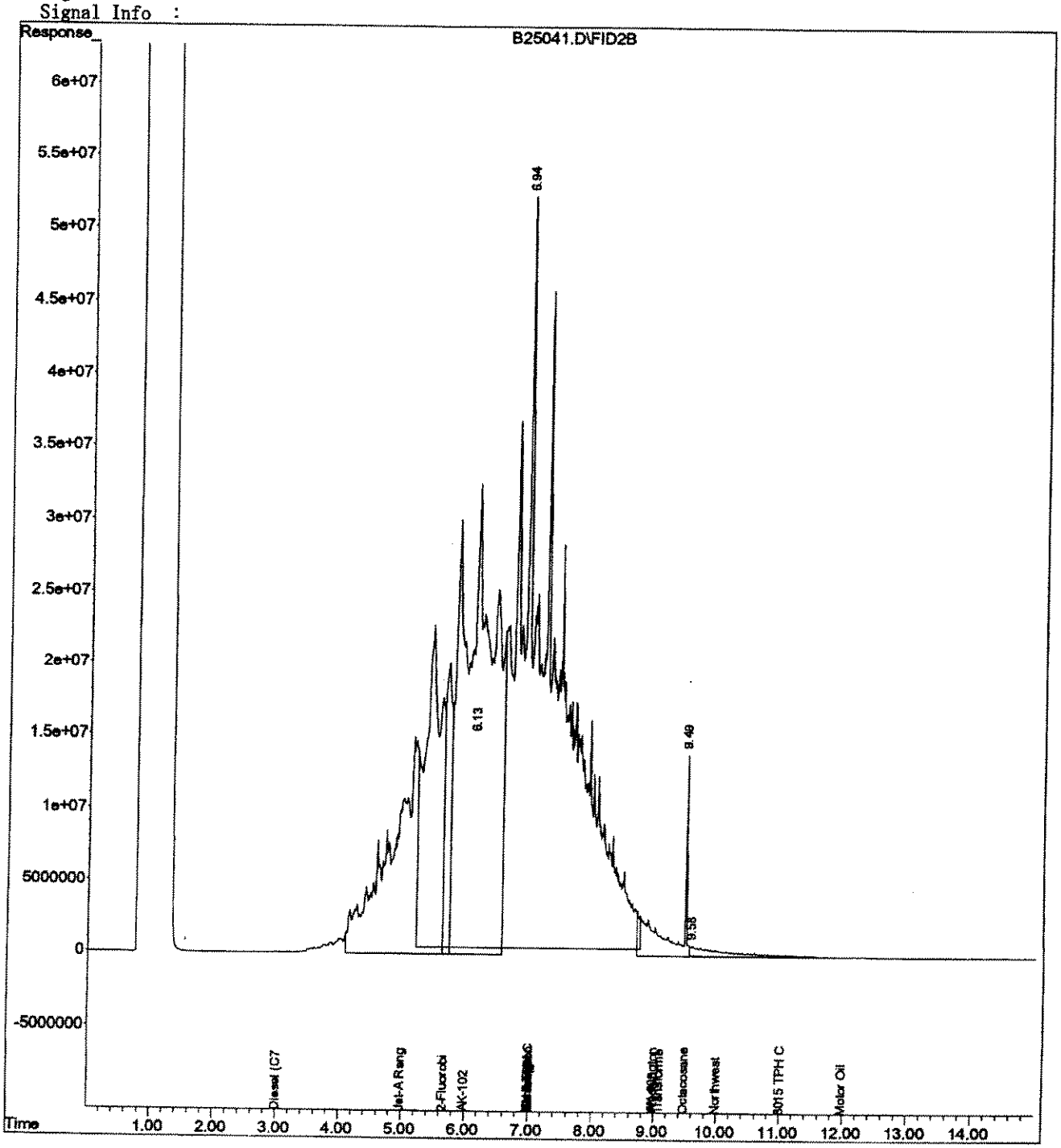


Quantitation Report (Not Reviewed)

Data File : D:¥HPCHEM¥1¥DATA¥022505.SEC¥B25041.D Vial: 25
Acq On : 25 Feb 2005 17:01 Operator: GSM
Sample : b5b0435-16 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 17:16 2005 Quant Results File: TRB0305.RES

Quant Method : D:¥HPCHEM¥1¥METHODS¥TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

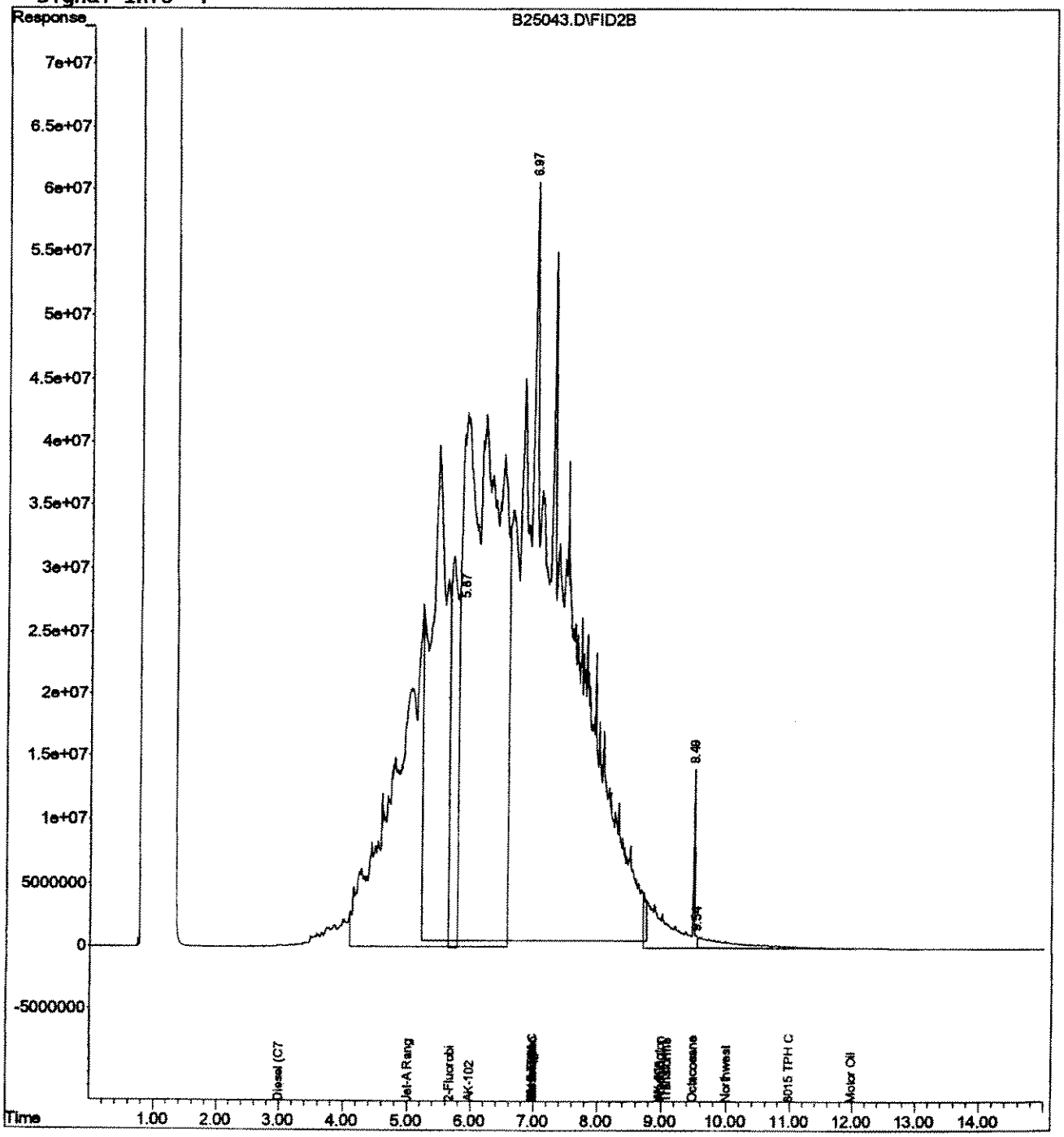


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25043.D Vial: 26
Acq On : 25 Feb 2005 17:24 Operator: GSM
Sample : b5b0435-17 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 17:40 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

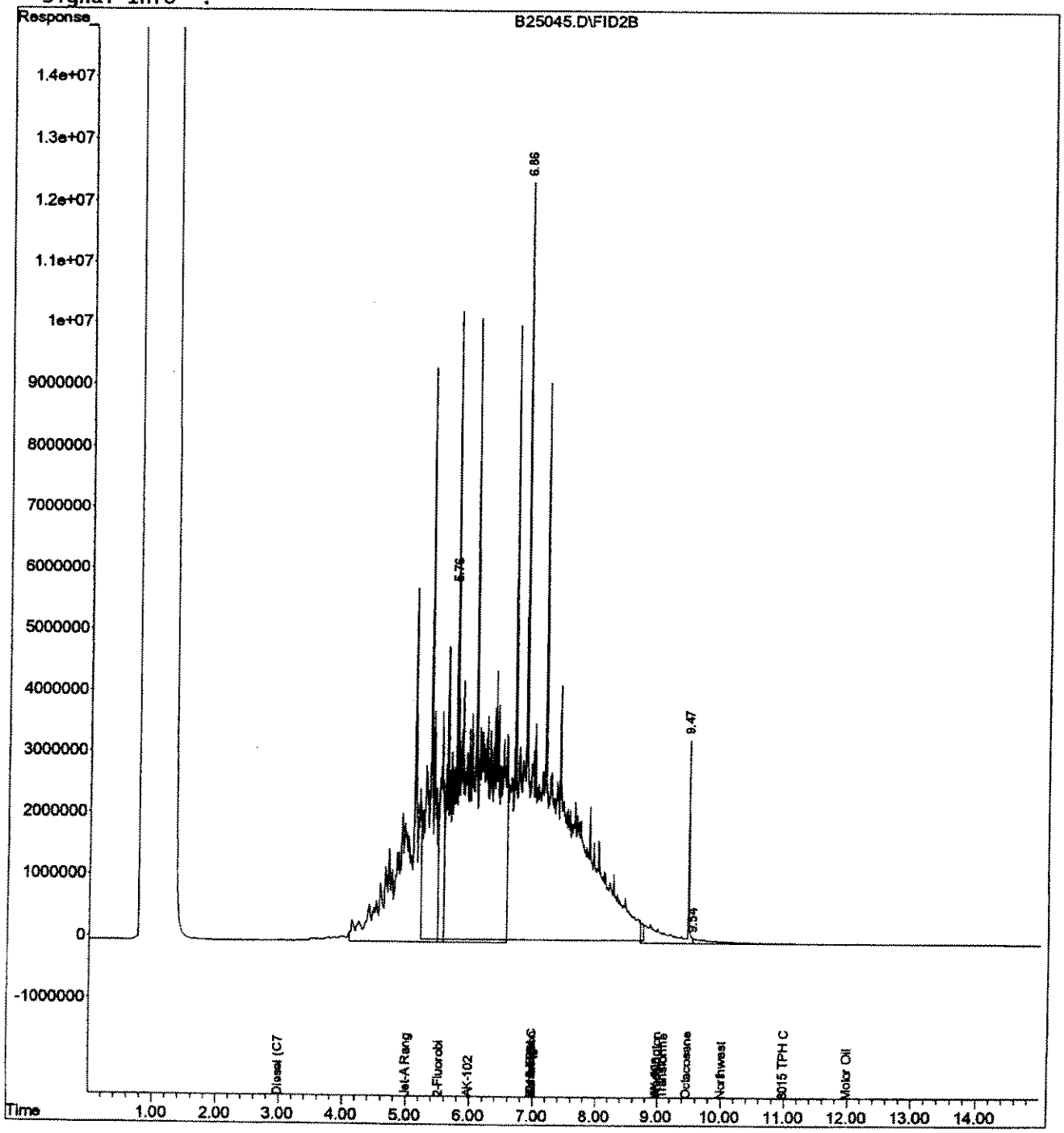


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25045.D Vial: 27
Acq On : 25 Feb 2005 17:47 Operator: GSM
Sample : b5b0435-18 Inst : GC #9
Misc : 5x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 18:03 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

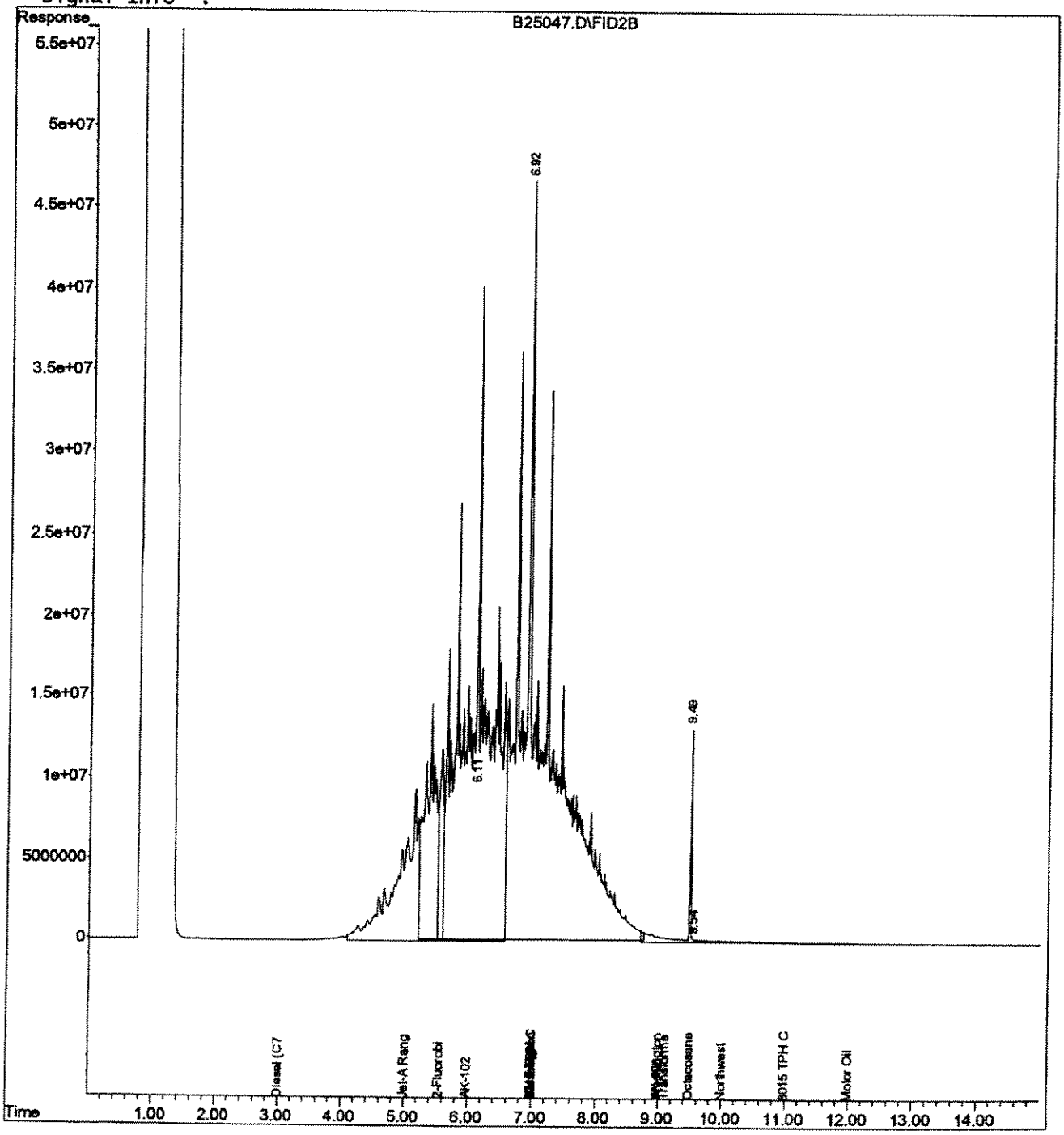


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25047.D Vial: 28
Acq On : 25 Feb 2005 18:11 Operator: GSM
Sample : b5b0435-19 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 18:26 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

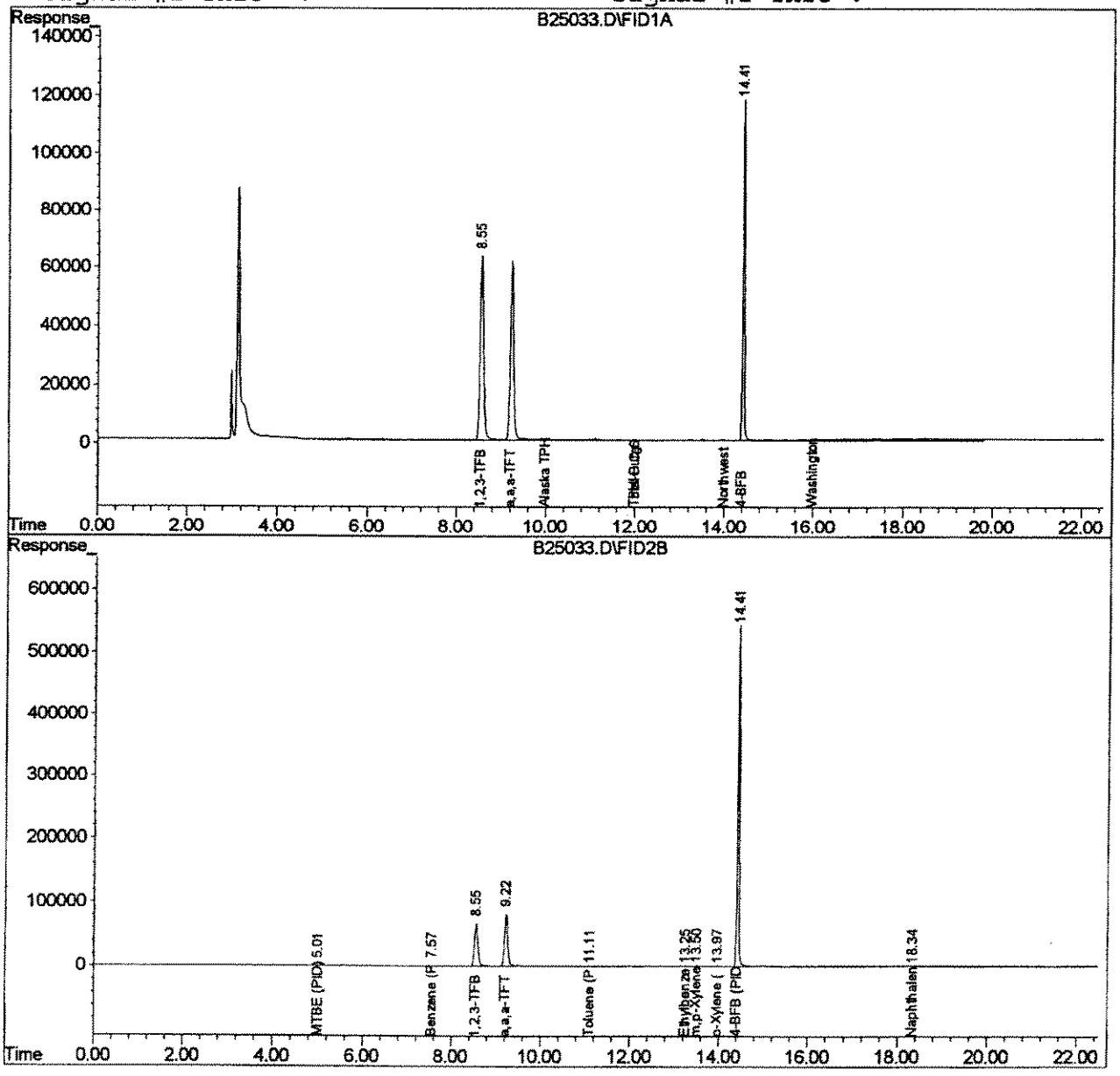


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25033.D\FID1A.CH Vial: 33
Signal #2 : D:\HPCHEM\3\DATA\022505\B25033.D\FID2B.CH
Acq On : 26 Feb 2005 4:07 Operator: tmk
Sample : b5b0435-01 r1 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 4:30 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

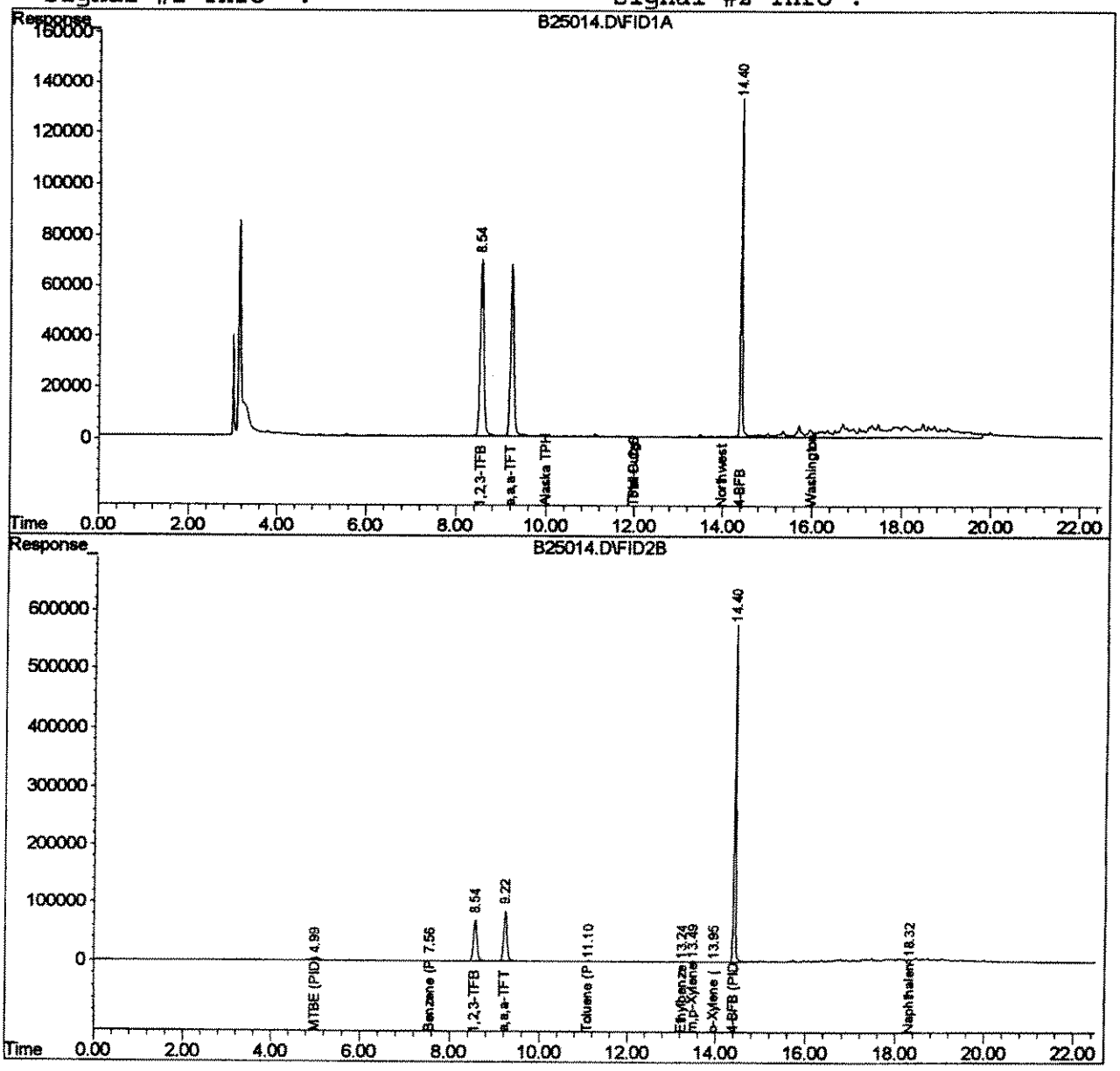


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25014.D\FID1A.CH Vial: 14
Signal #2 : D:\HPCHEM\3\DATA\022505\B25014.D\FID2B.CH
Acq On : 25 Feb 2005 17:26 Operator: tmk
Sample : b5b0435-02 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 17:49 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

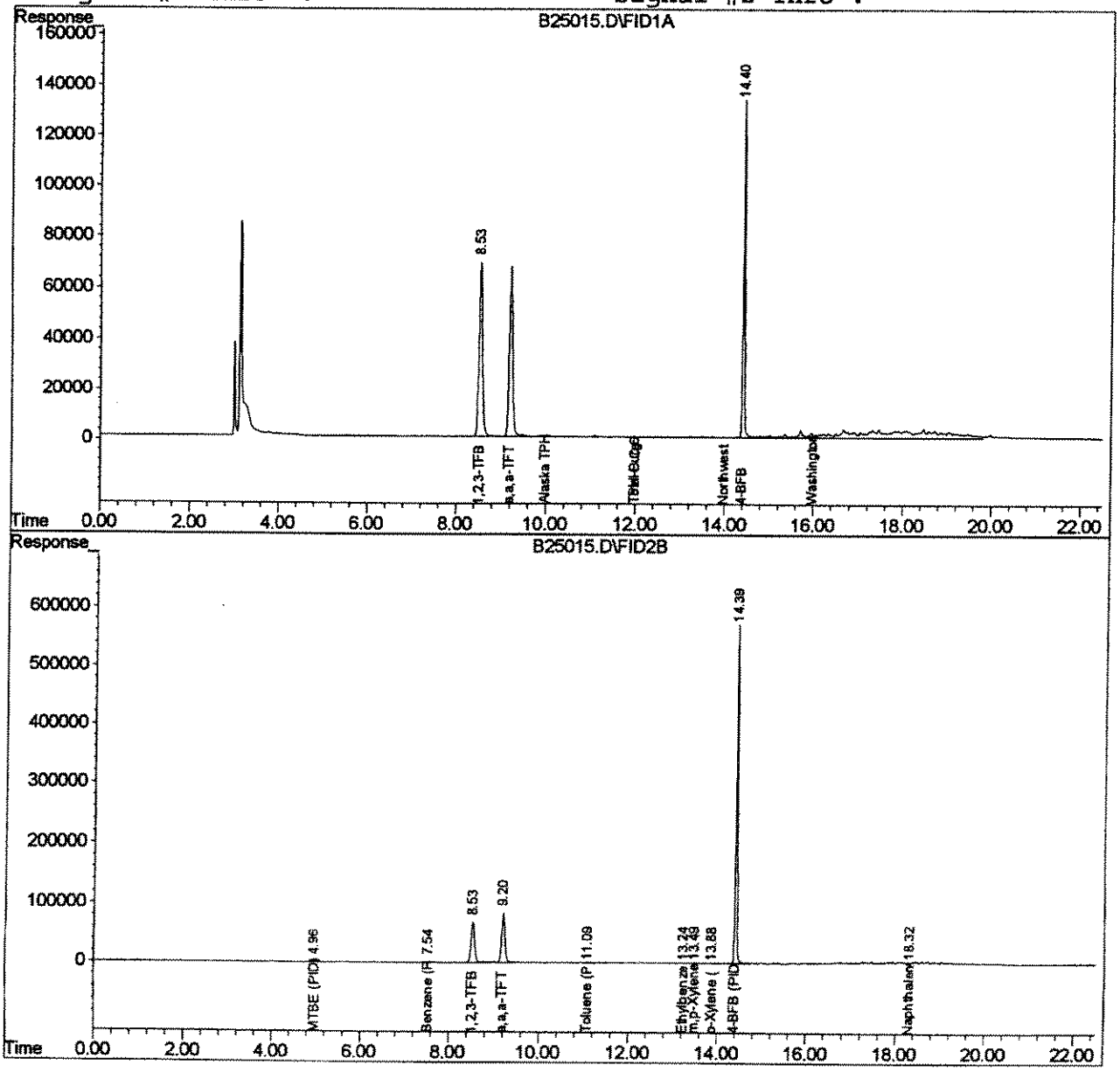


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25015.D\FID1A.CH Vial: 15
Signal #2 : D:\HPCHEM\3\DATA\022505\B25015.D\FID2B.CH
Acq On : 25 Feb 2005 17:56 Operator: tmk
Sample : b5b0435-03 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 18:19 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

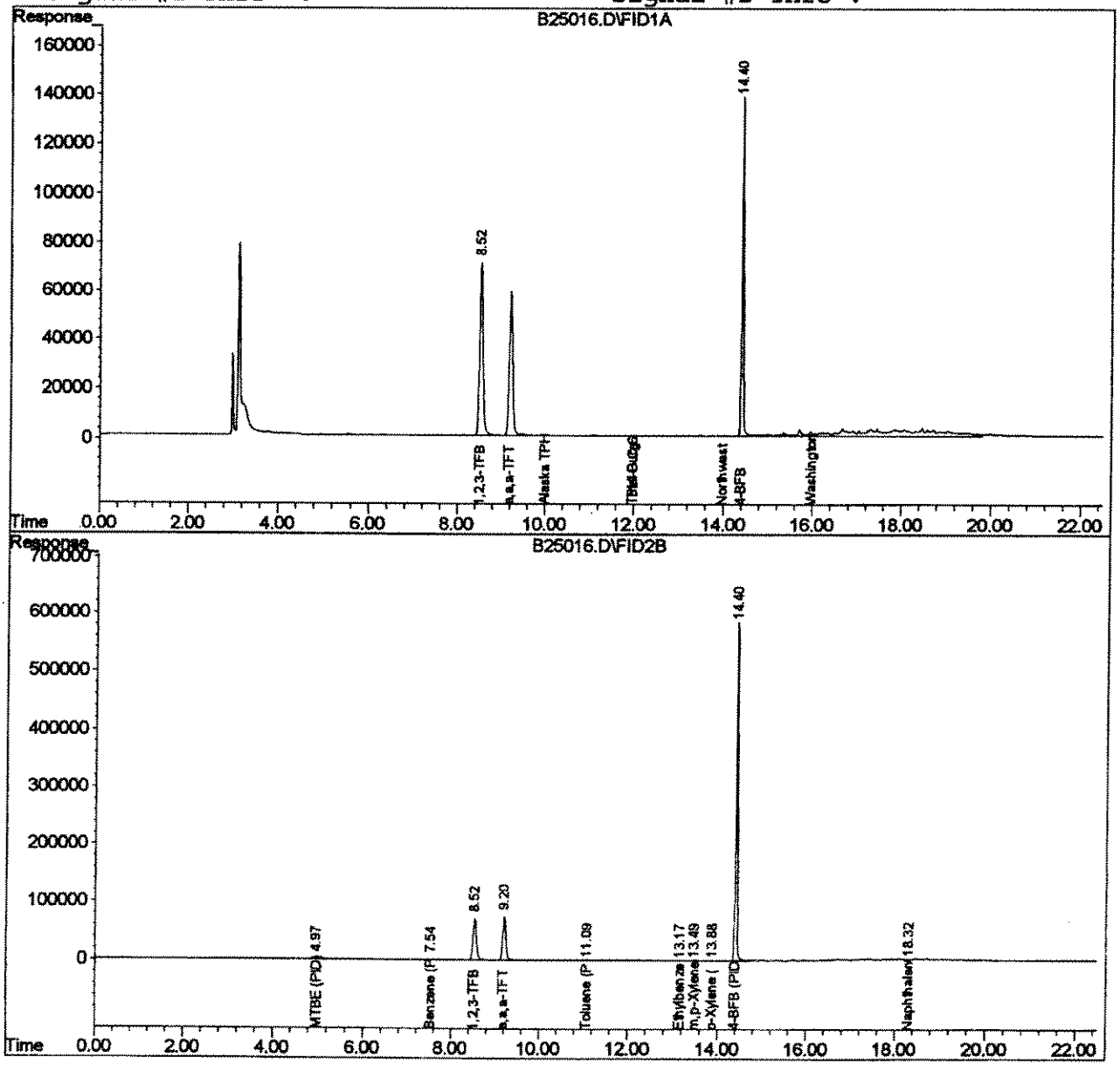


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25016.D\FID1A.CH Vial: 16
Signal #2 : D:\HPCHEM\3\DATA\022505\B25016.D\FID2B.CH
Acq On : 25 Feb 2005 18:26 Operator: tmk
Sample : b5b0435-04 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 18:49 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

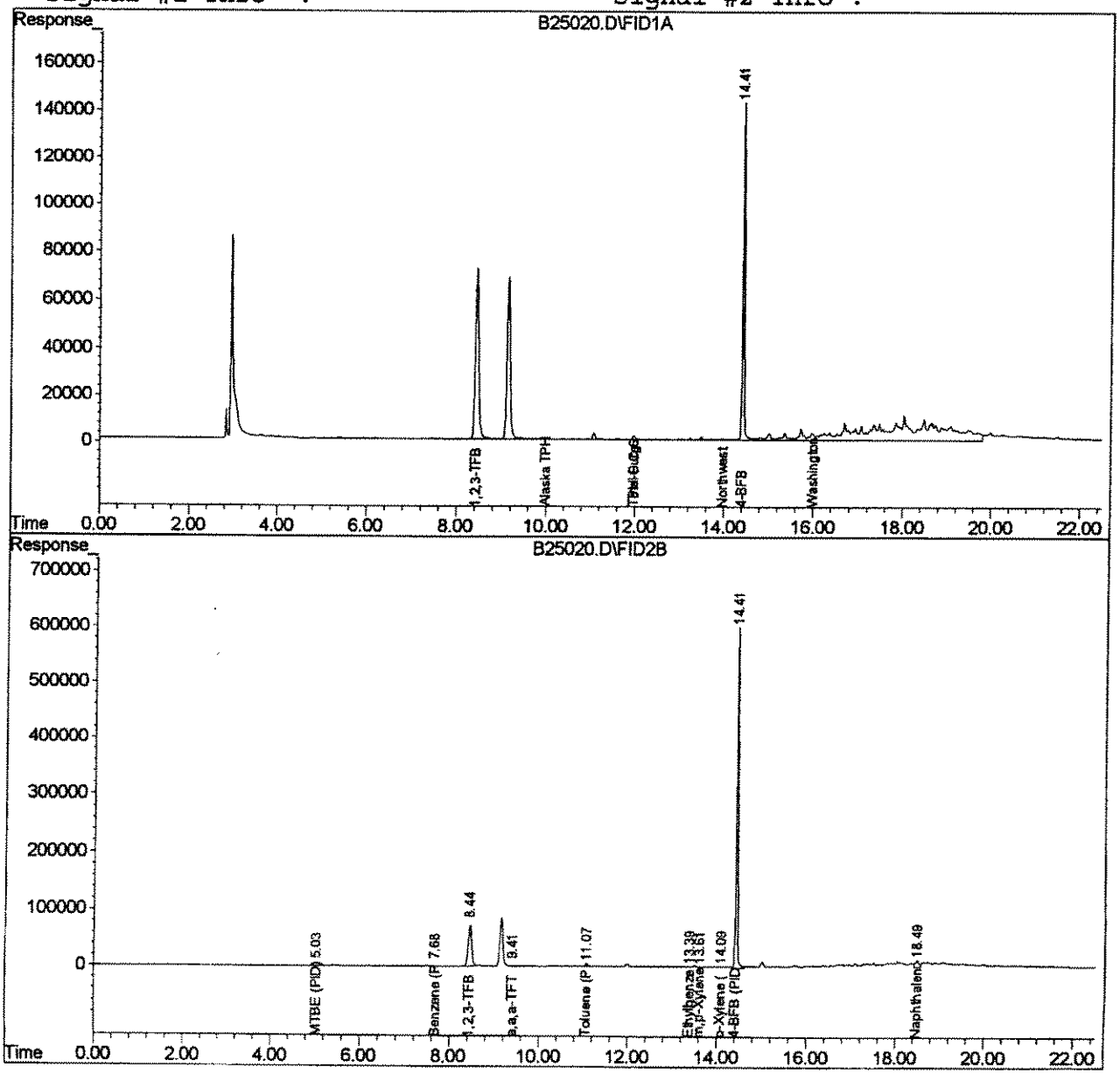


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25020.D\FID1A.CH Vial: 20
Signal #2 : D:\HPCHEM\3\DATA\022505\B25020.D\FID2B.CH
Acq On : 25 Feb 2005 21:46 Operator: tmk
Sample : b5b0435-05 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 18:35 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

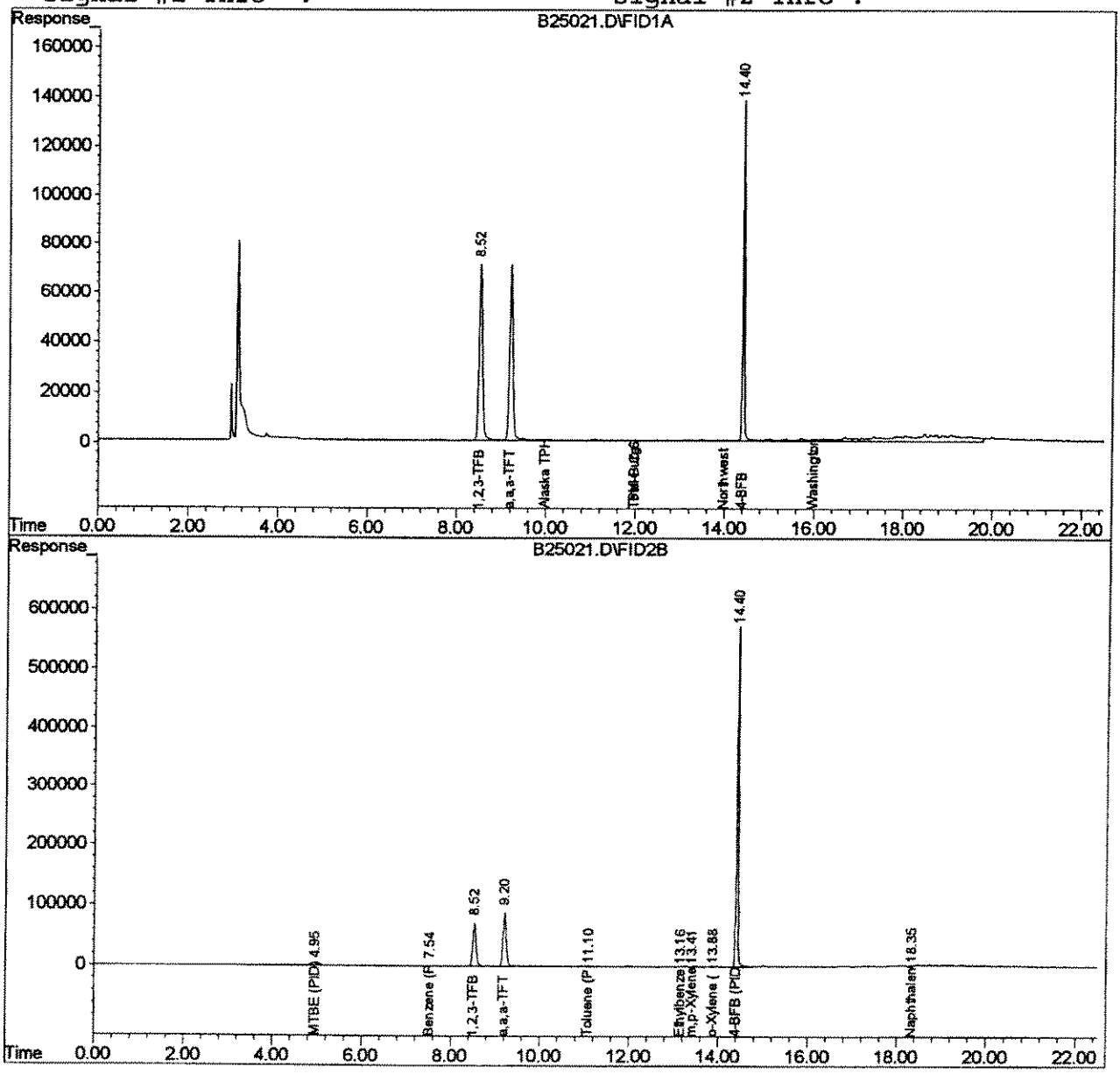


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25021.D\FID1A.CH Vial: 21
Signal #2 : D:\HPCHEM\3\DATA\022505\B25021.D\FID2B.CH
Acq On : 25 Feb 2005 22:15 Operator: tmk
Sample : b5b0435-06 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 22:38 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

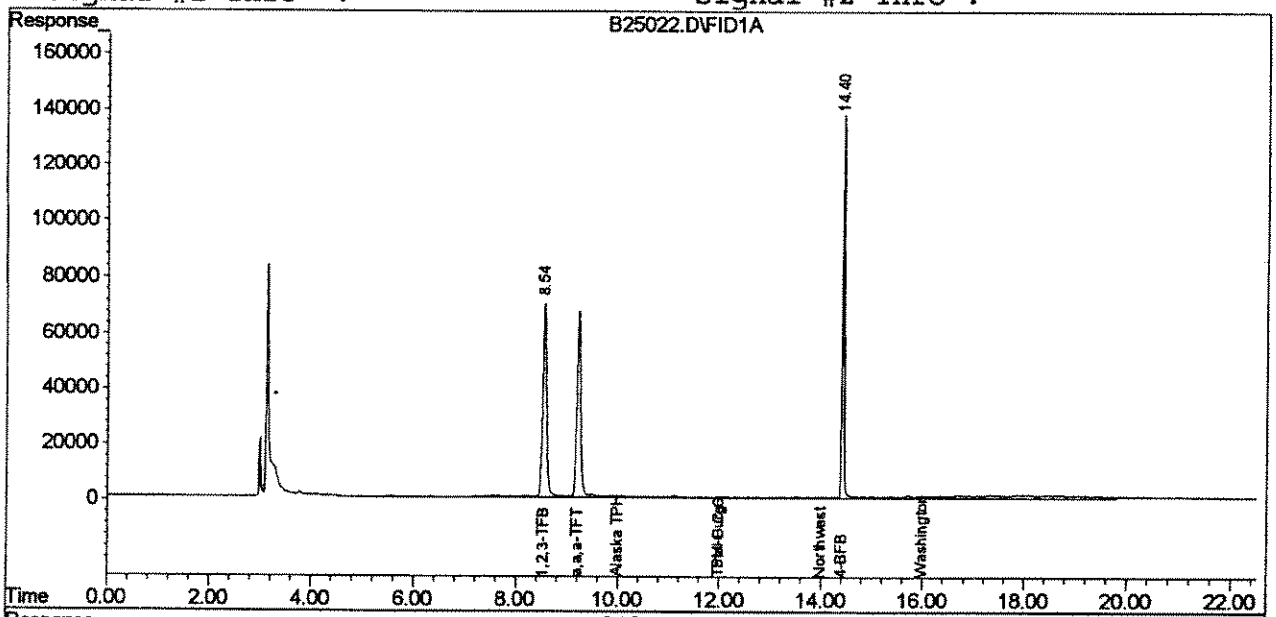


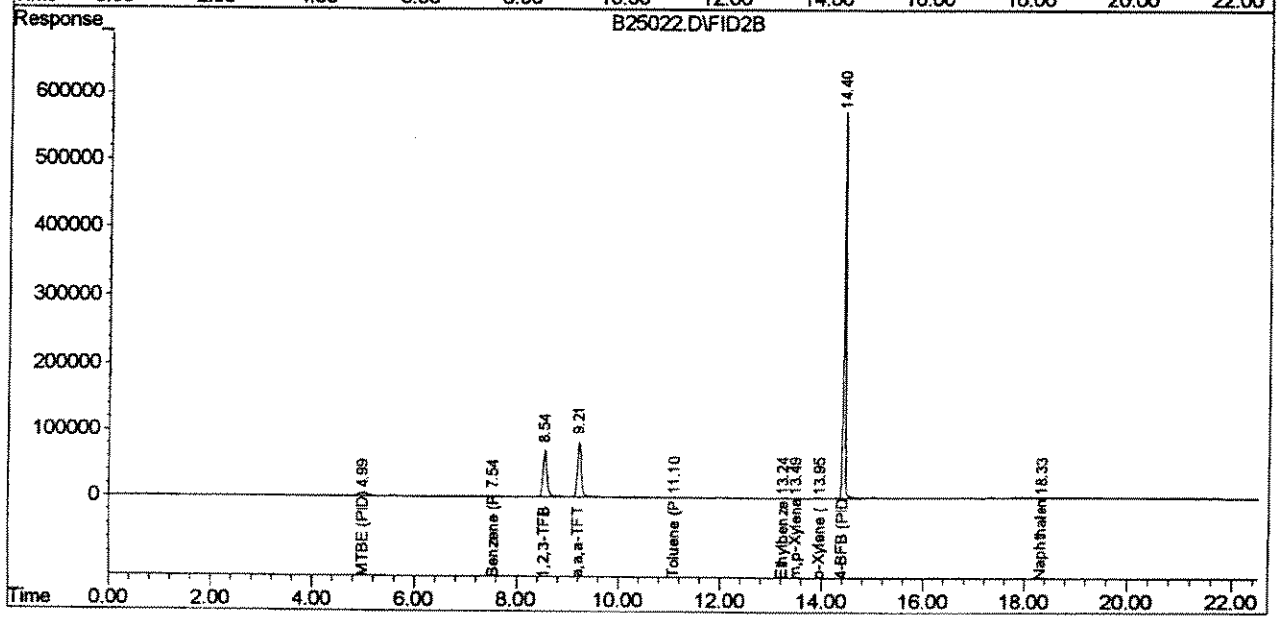
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25022.D\FID1A.CH Vial: 22
Signal #2 : D:\HPCHEM\3\DATA\022505\B25022.D\FID2B.CH
Acq On : 25 Feb 2005 22:44 Operator: tmk
Sample : b5b0435-07 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 23:09 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



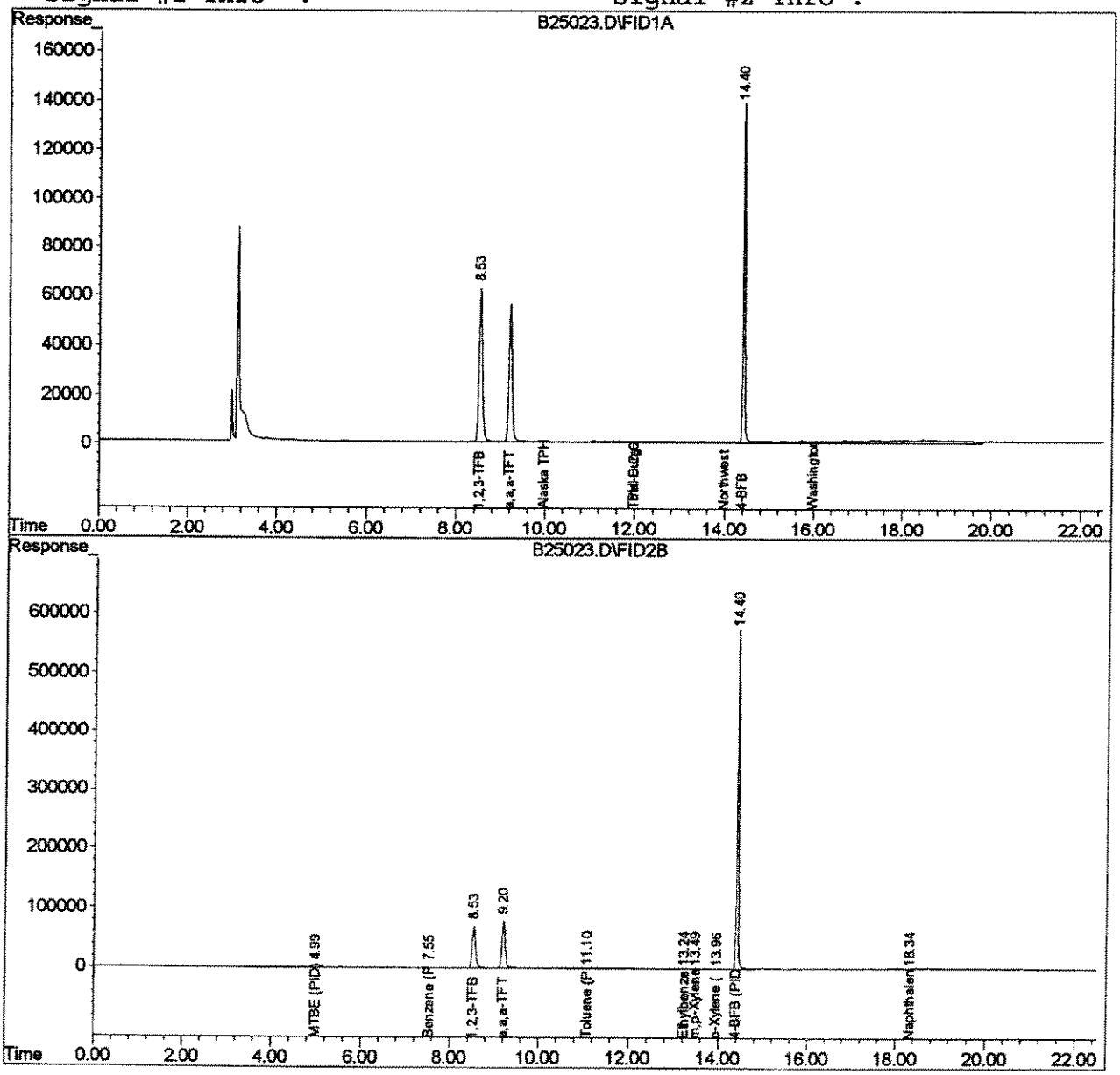


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25023.D\FID1A.CH Vial: 23
Signal #2 : D:\HPCHEM\3\DATA\022505\B25023.D\FID2B.CH
Acq On : 25 Feb 2005 23:14 Operator: tmk
Sample : b5b0435-08 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 23:37 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

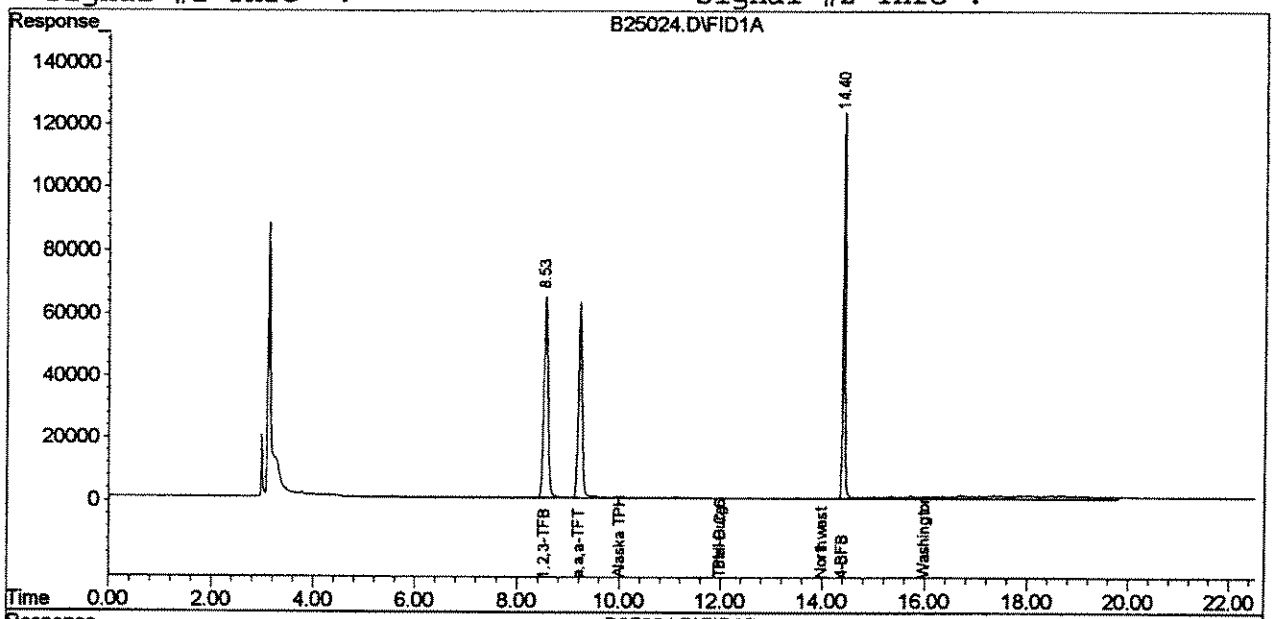


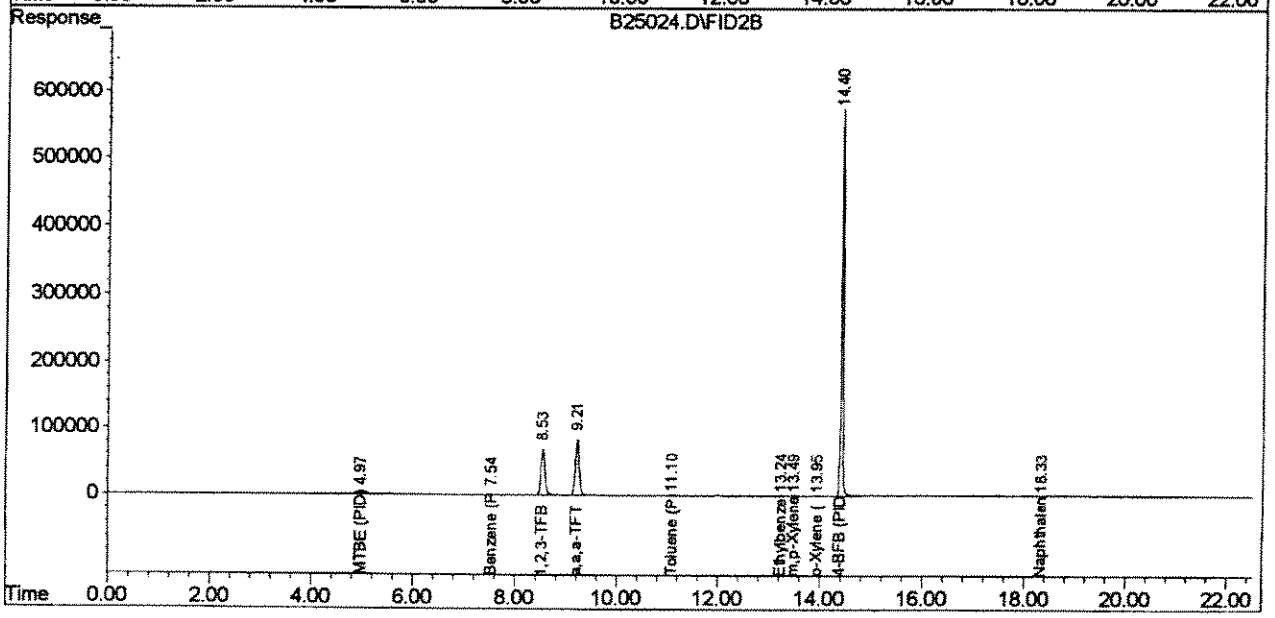
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25024.D\FID1A.CH Vial: 24
Signal #2 : D:\HPCHEM\3\DATA\022505\B25024.D\FID2B.CH
Acq On : 25 Feb 2005 23:43 Operator: tmk
Sample : b5b0435-09 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 0:06 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



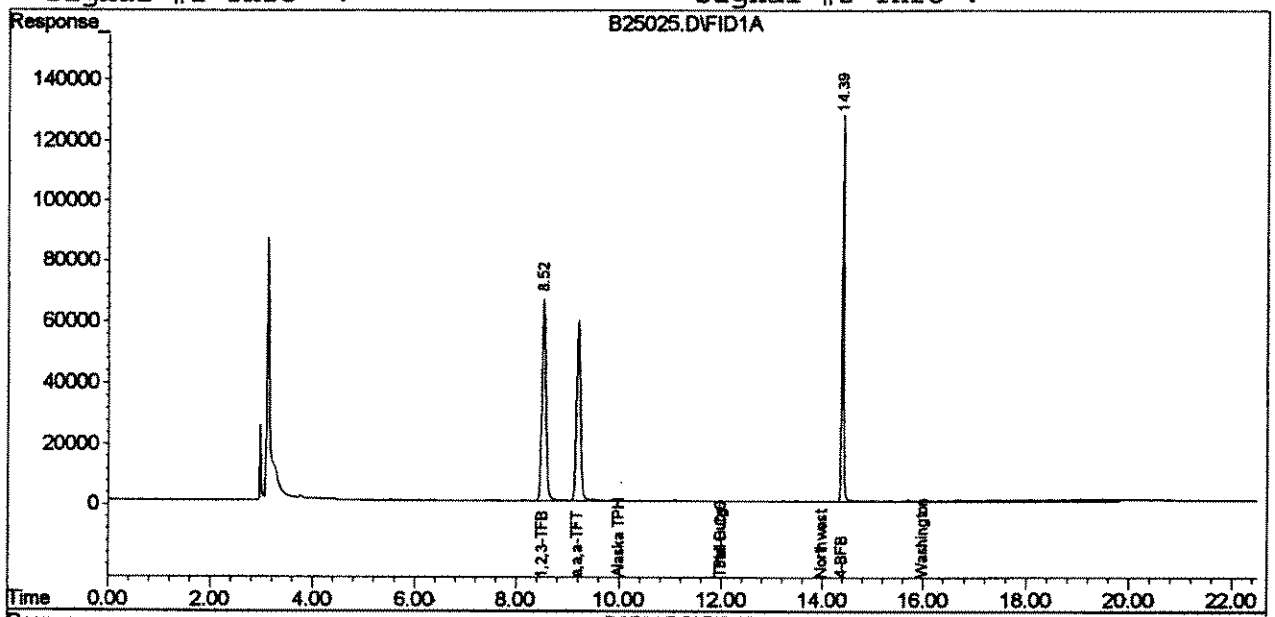


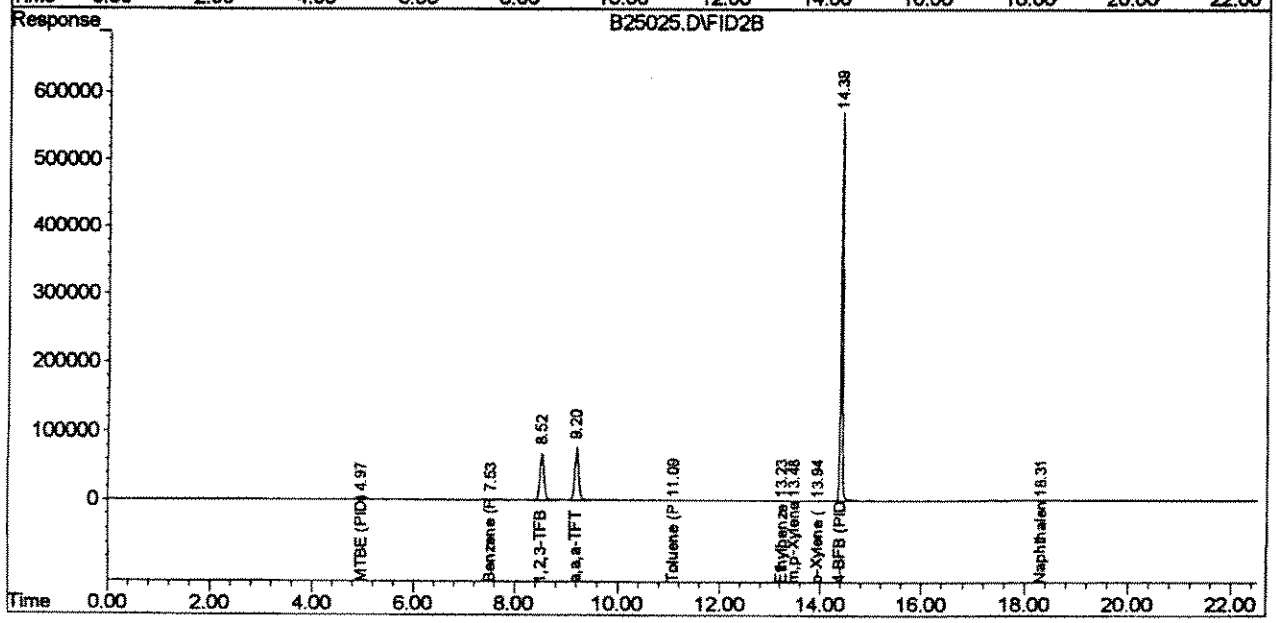
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25025.D\FID1A.CH Vial: 25
Signal #2 : D:\HPCHEM\3\DATA\022505\B25025.D\FID2B.CH
Acq On : 26 Feb 2005 00:12 Operator: tmk
Sample : b5b0435-10 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 0:35 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



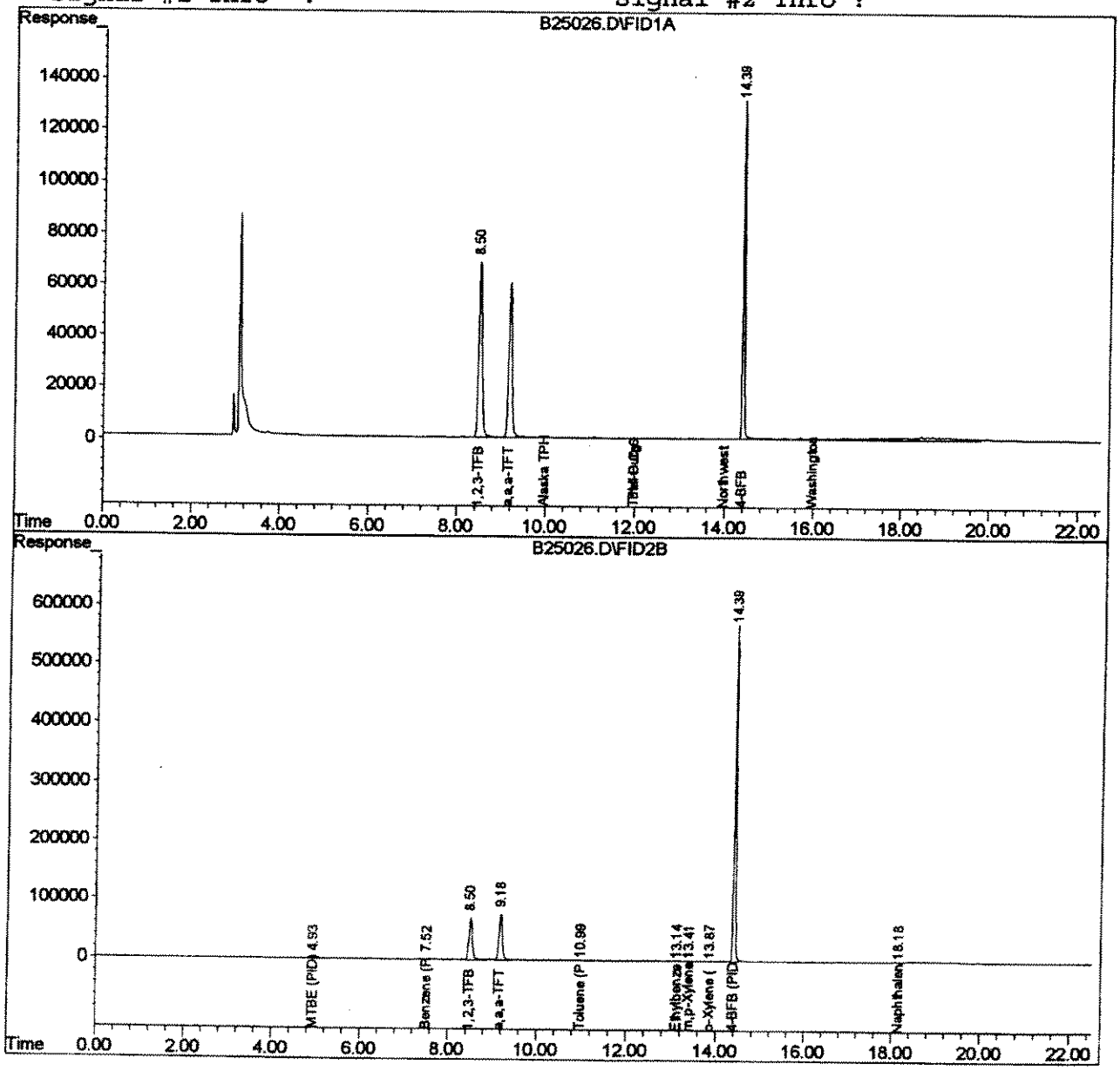


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25026.D\FID1A.CH Vial: 26
Signal #2 : D:\HPCHEM\3\DATA\022505\B25026.D\FID2B.CH
Acq On : 26 Feb 2005 00:41 Operator: tmk
Sample : b5b0435-11 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 4 17:40 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

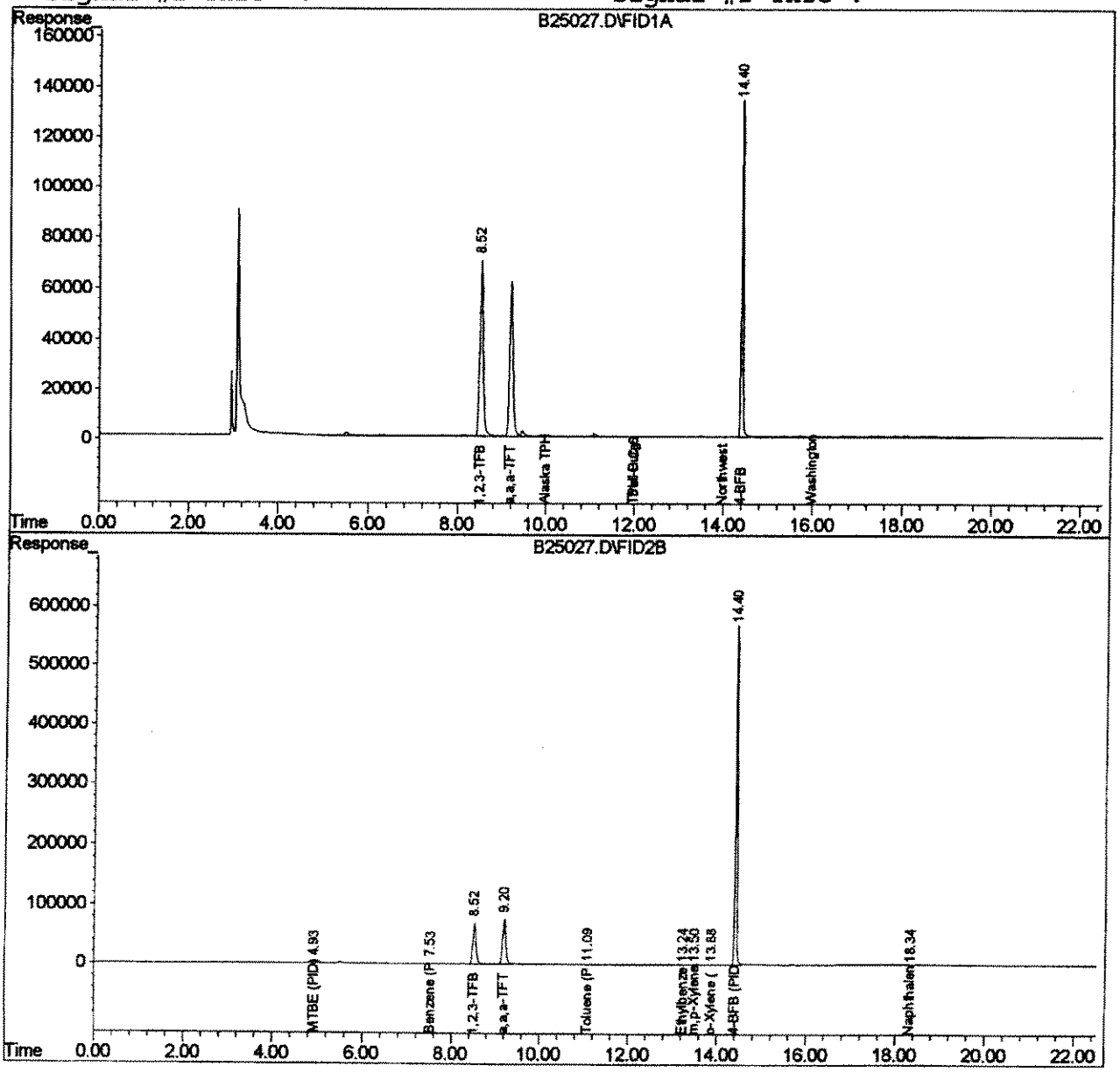


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25027.D\FID1A.CH Vial: 27
Signal #2 : D:\HPCHEM\3\DATA\022505\B25027.D\FID2B.CH
Acq On : 26 Feb 2005 1:11 Operator: tmk
Sample : b5b0435-12 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 4 17:40 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

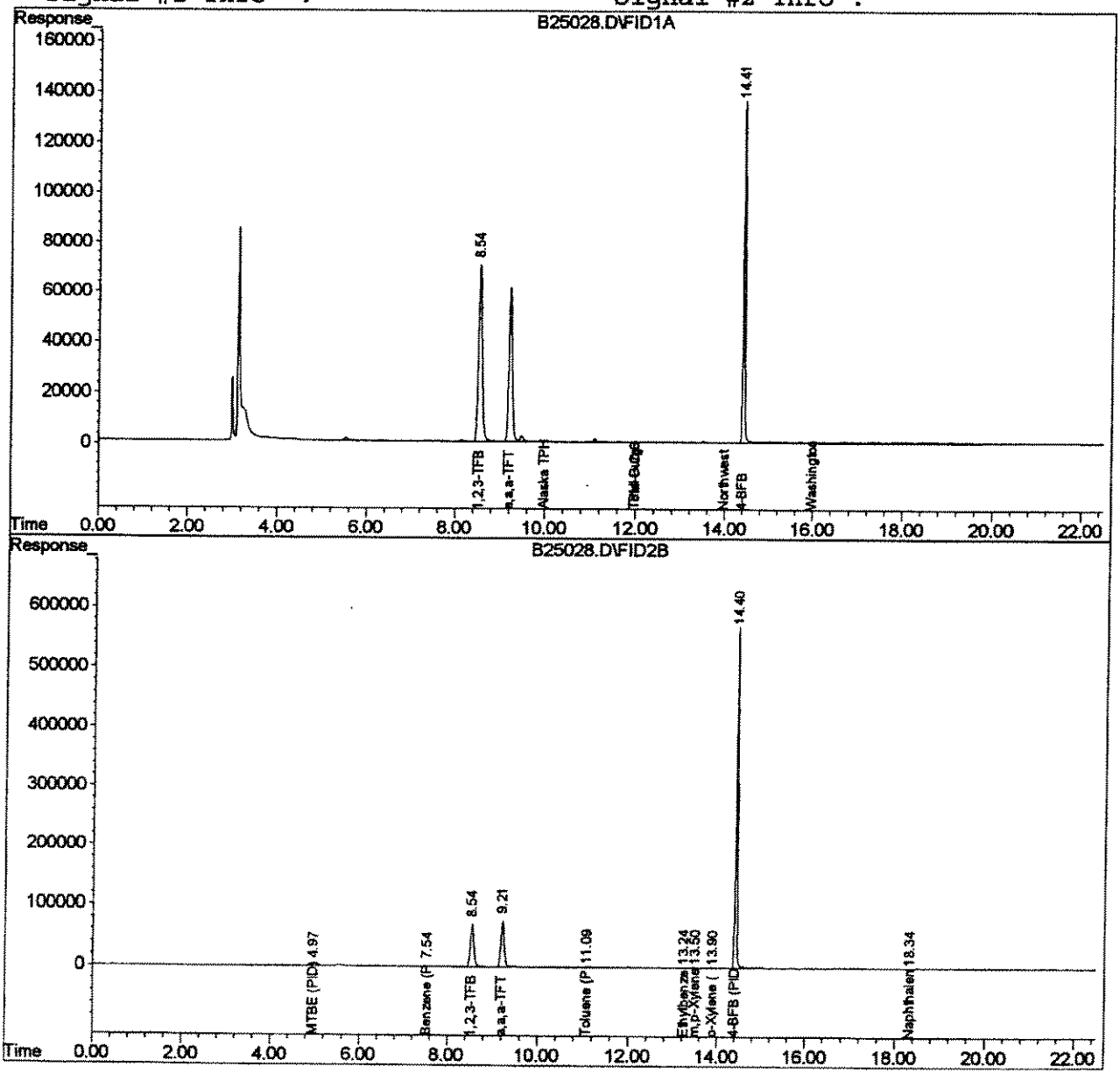


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25028.D\FID1A.CH Vial: 28
Signal #2 : D:\HPCHEM\3\DATA\022505\B25028.D\FID2B.CH
Acq On : 26 Feb 2005 1:40 Operator: tmk
Sample : b5b0435-13 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 2:03 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

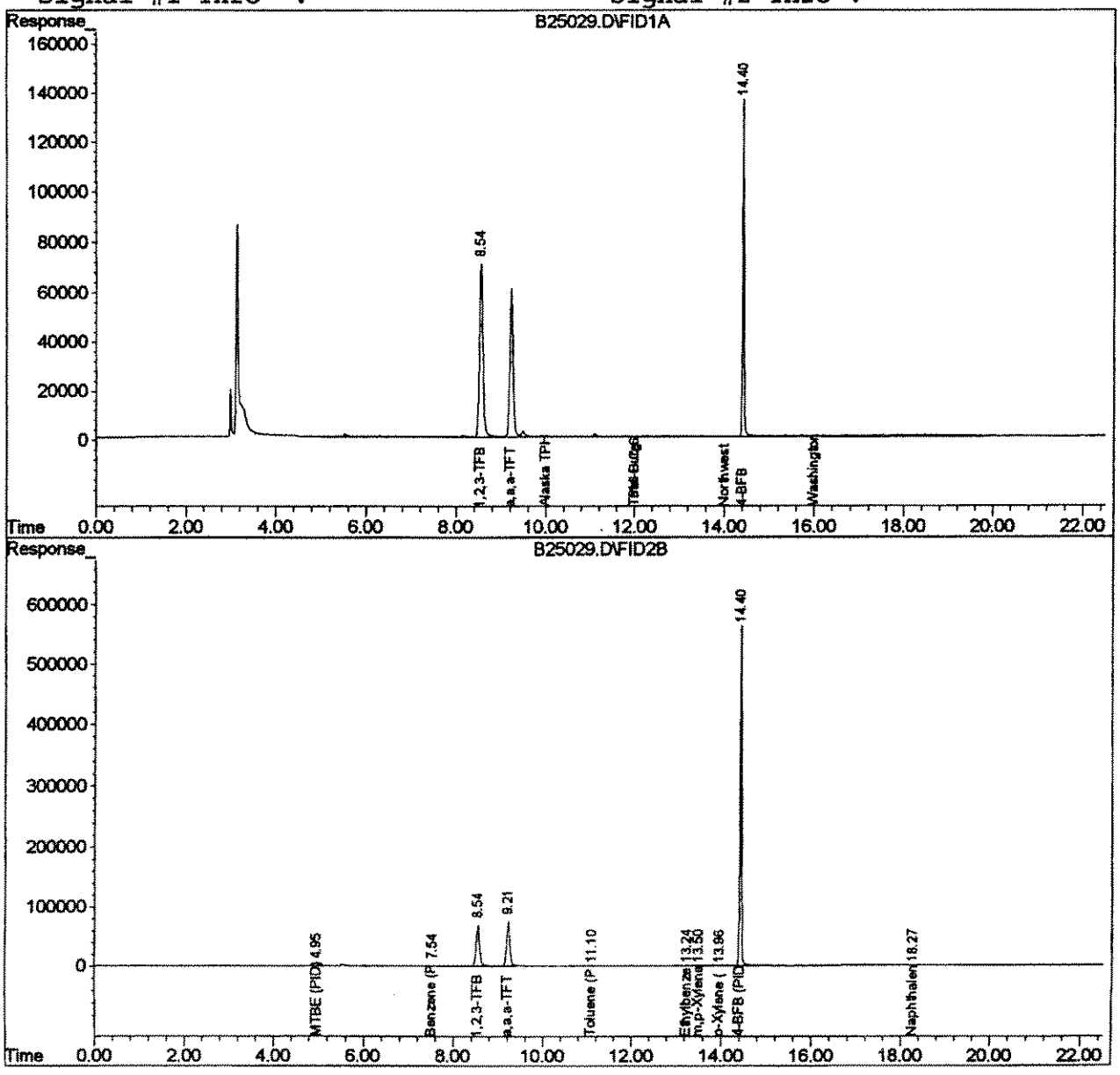


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25029.D\FID1A.CH Vial: 29
Signal #2 : D:\HPCHEM\3\DATA\022505\B25029.D\FID2B.CH
Acq On : 26 Feb 2005 2:09 Operator: tmk
Sample : b5b0435-14 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 26 2:32 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

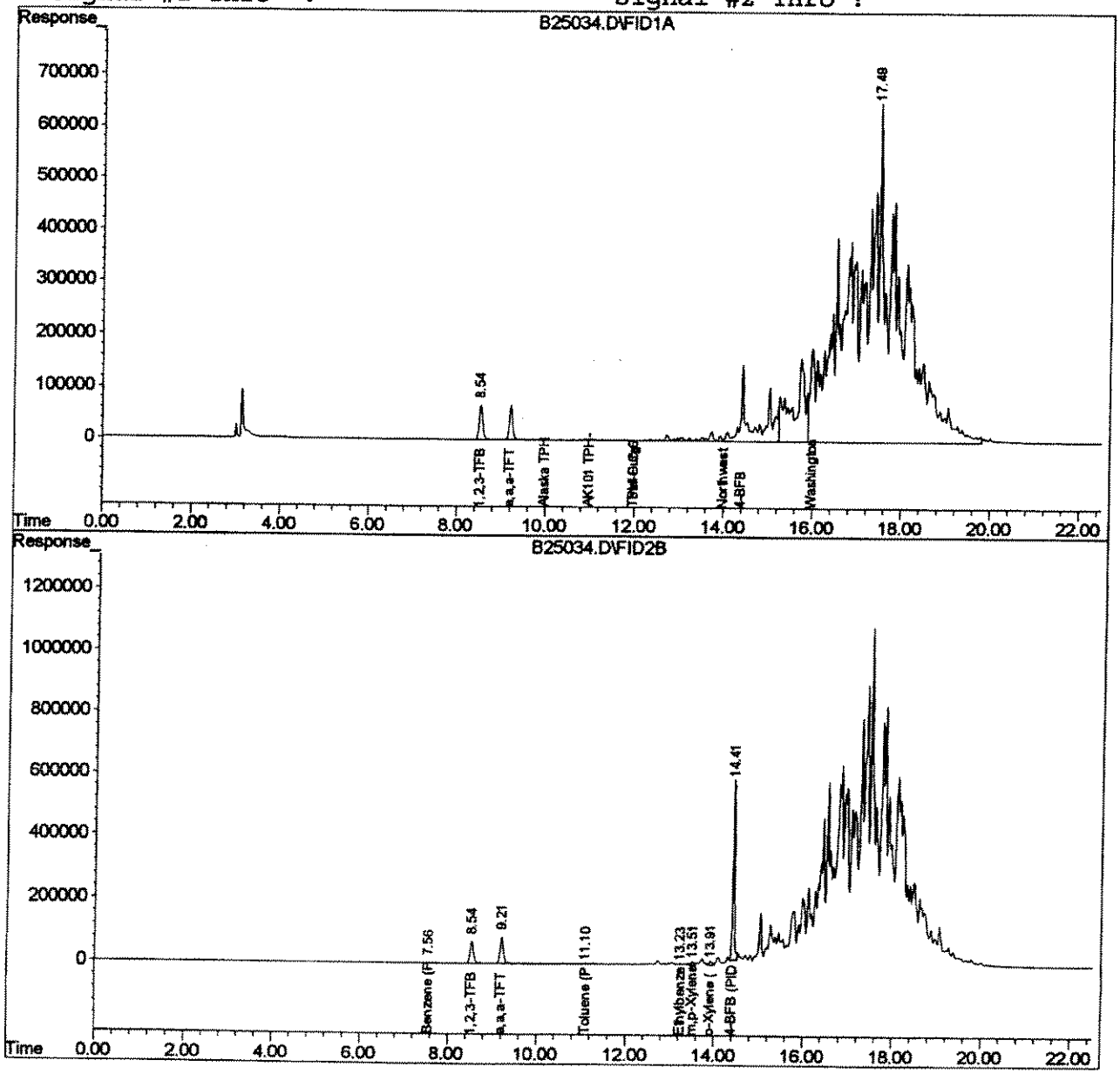


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25034.D\FID1A.CH Vial: 34
Signal #2 : D:\HPCHEM\3\DATA\022505\B25034.D\FID2B.CH
Acq On : 26 Feb 2005 4:36 Operator: tmk
Sample : b5b0435-15 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 8 19:12 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

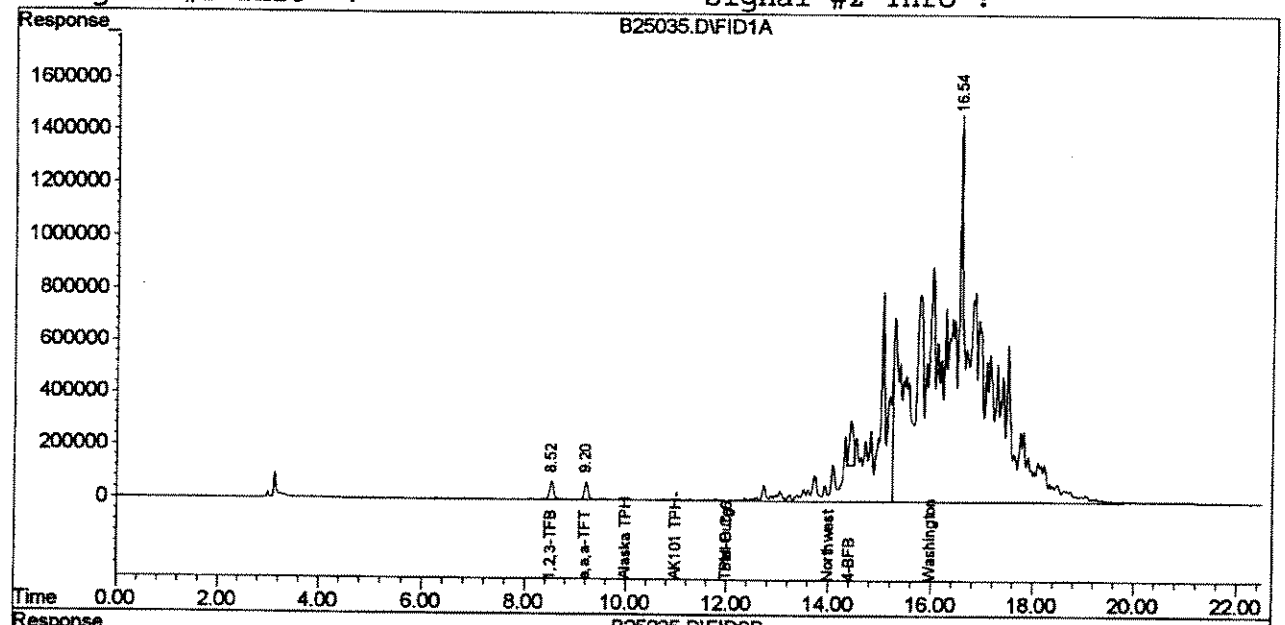


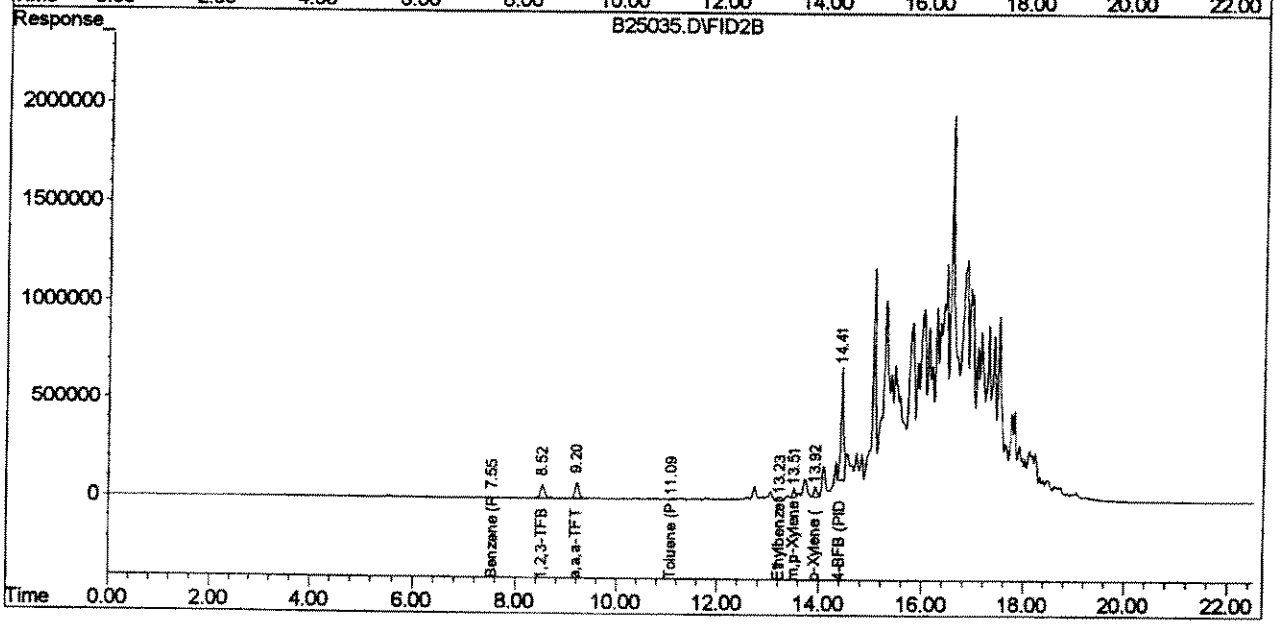
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25035.D\FID1A.CH Vial: 35
Signal #2 : D:\HPCHEM\3\DATA\022505\B25035.D\FID2B.CH
Acq On : 26 Feb 2005 5:05 Operator: tmk
Sample : b5b0435-16 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 8 19:18 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



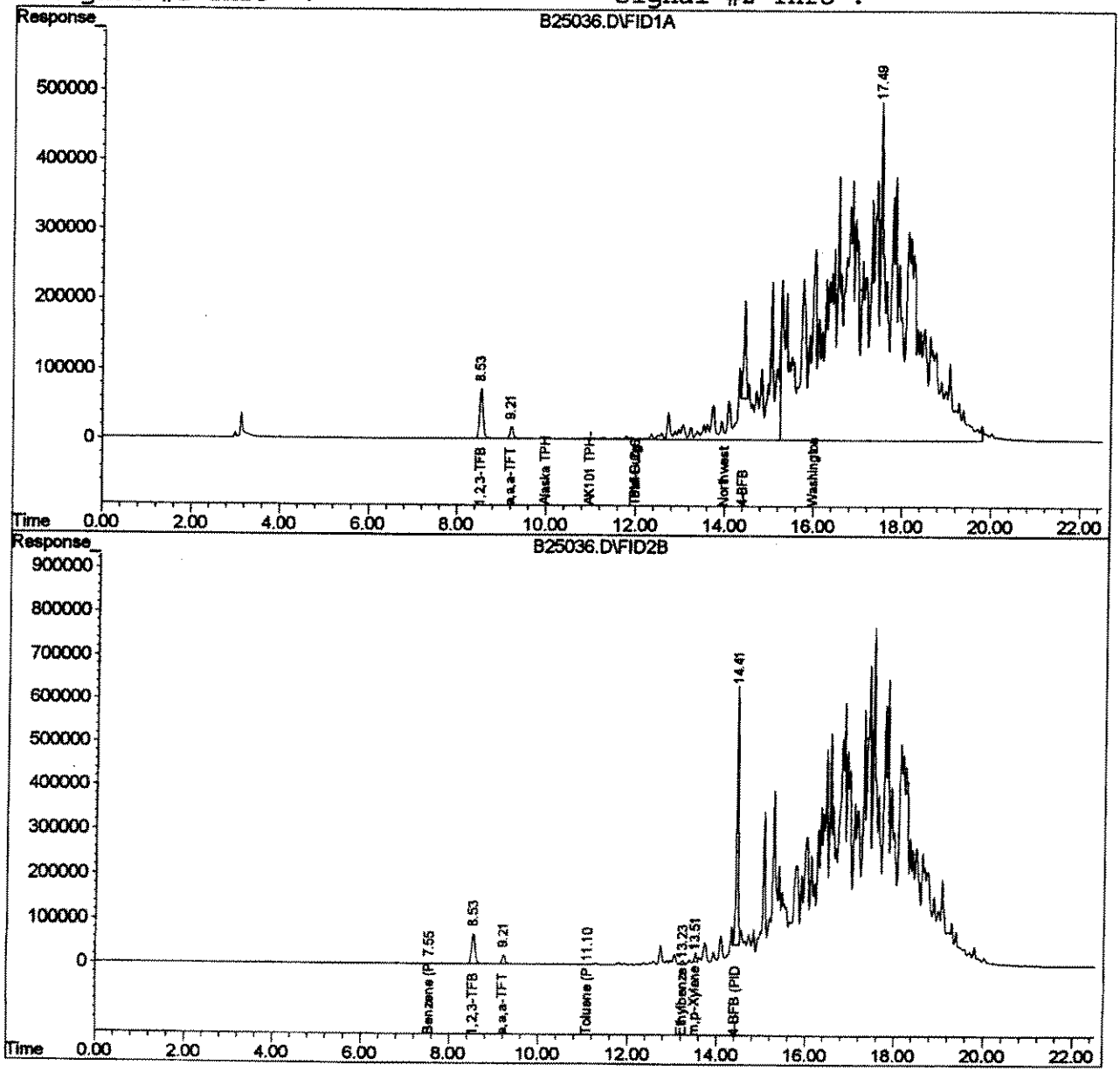


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25036.D\FID1A.CH Vial: 36
Signal #2 : D:\HPCHEM\3\DATA\022505\B25036.D\FID2B.CH
Acq On : 26 Feb 2005 5:35 Operator: tmk
Sample : b5b0435-17re1 Inst : GC #6
Misc : 4x 25 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 8 19:21 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

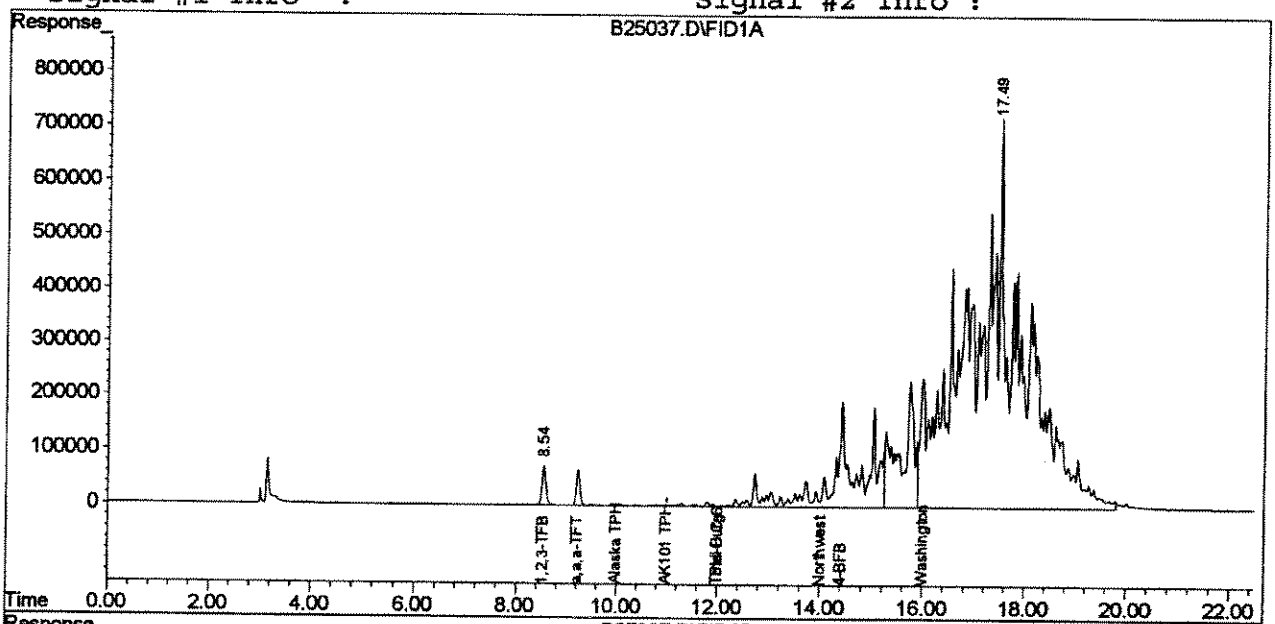


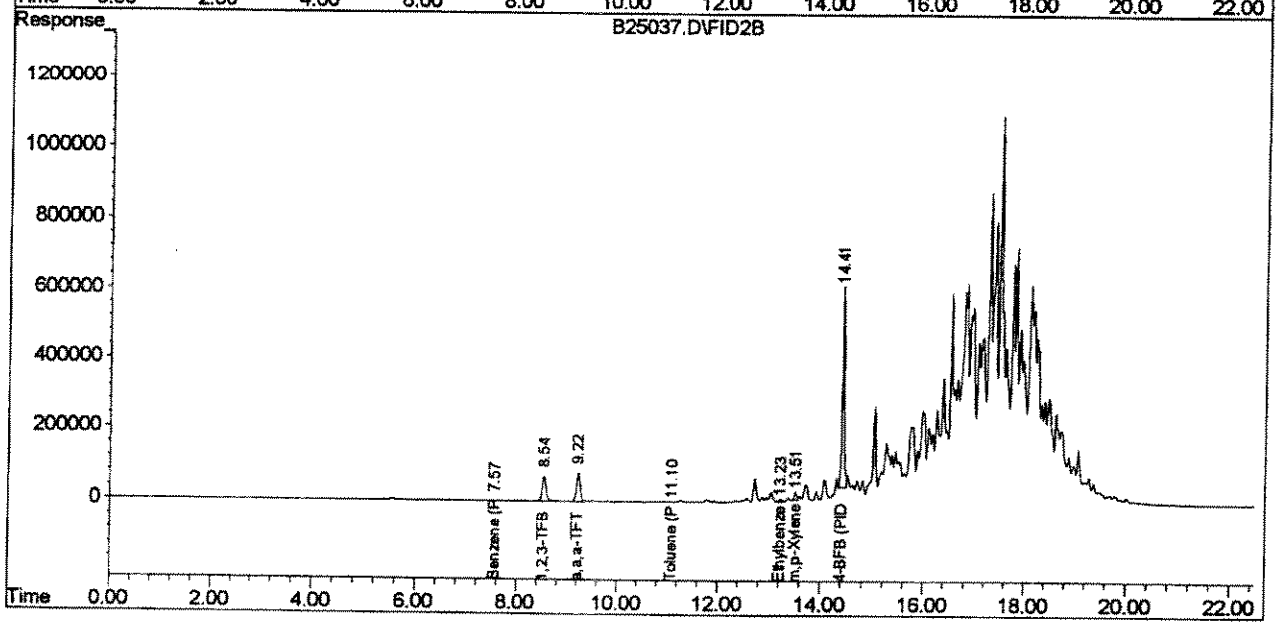
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25037.D\FID1A.CH Vial: 37
Signal #2 : D:\HPCHEM\3\DATA\022505\B25037.D\FID2B.CH
Acq On : 26 Feb 2005 6:05 Operator: tmk
Sample : b5b0435-18 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 8 19:22 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



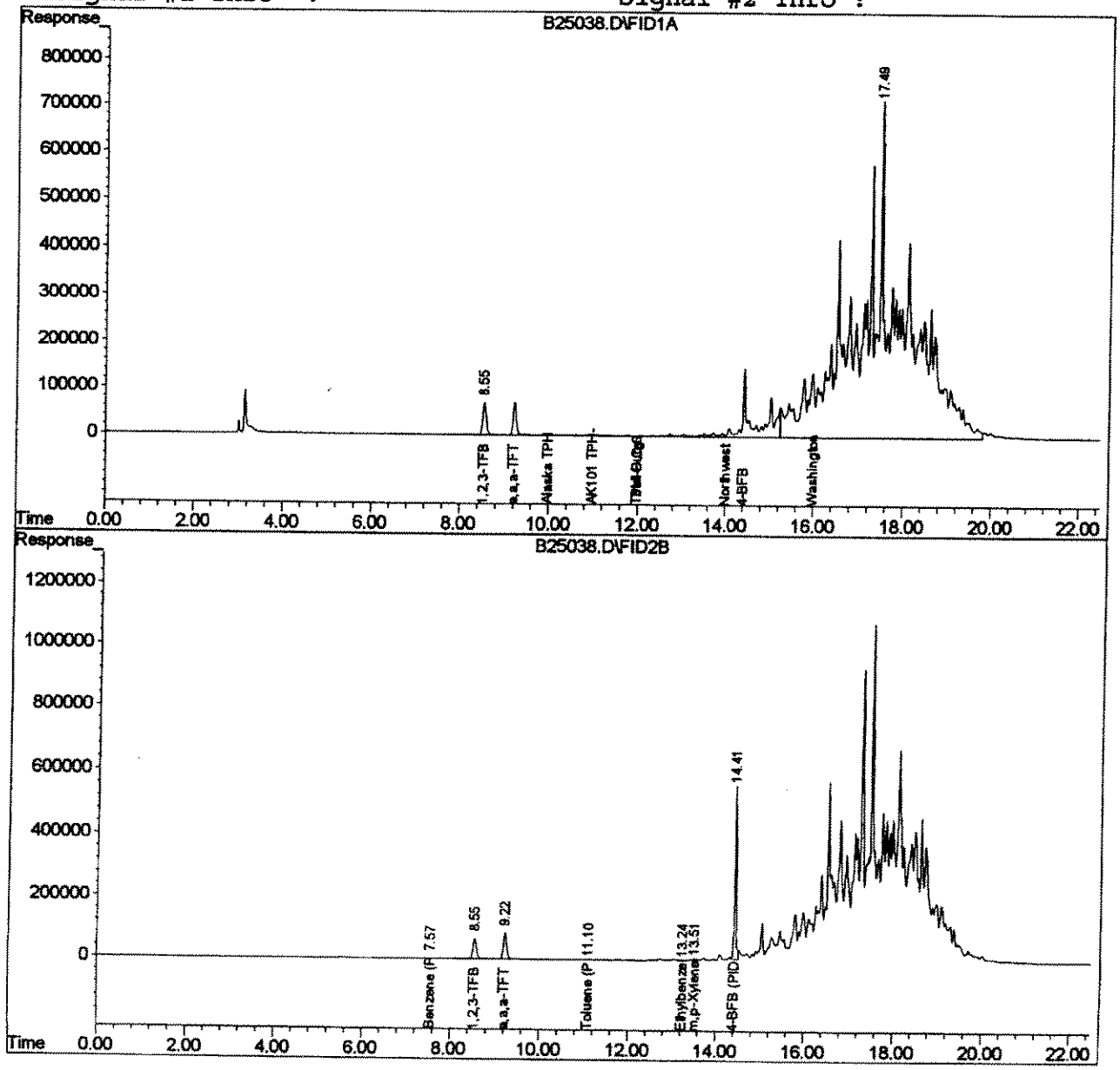


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25038.D\FID1A.CH Vial: 38
Signal #2 : D:\HPCHEM\3\DATA\022505\B25038.D\FID2B.CH
Acq On : 26 Feb 2005 6:34 Operator: tmk
Sample : b5b0435-19 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Mar 8 19:25 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

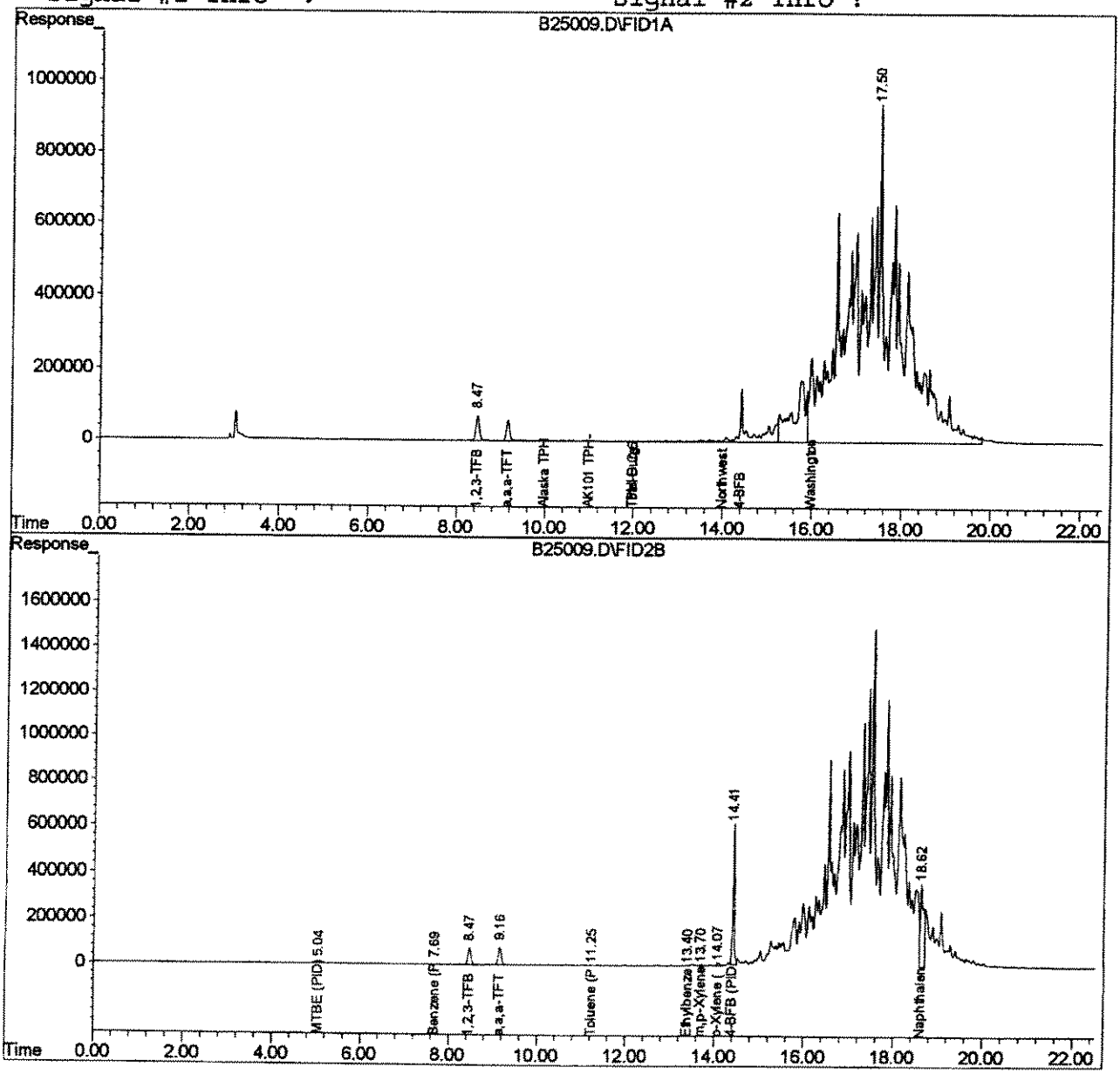


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25009.D\FID1A.CH Vial: 9
Signal #2 : D:\HPCHEM\3\DATA\022505\B25009.D\FID2B.CH
Acq On : 25 Feb 2005 14:41 Operator: tmk
Sample : b5b0435-20 Inst : GC #6
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E
Quant Time: Feb 25 15:25 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Wed Jan 26 17:03:34 2005
Response via : Multiple Level Calibration
DataAcq Meth : TGA2505.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

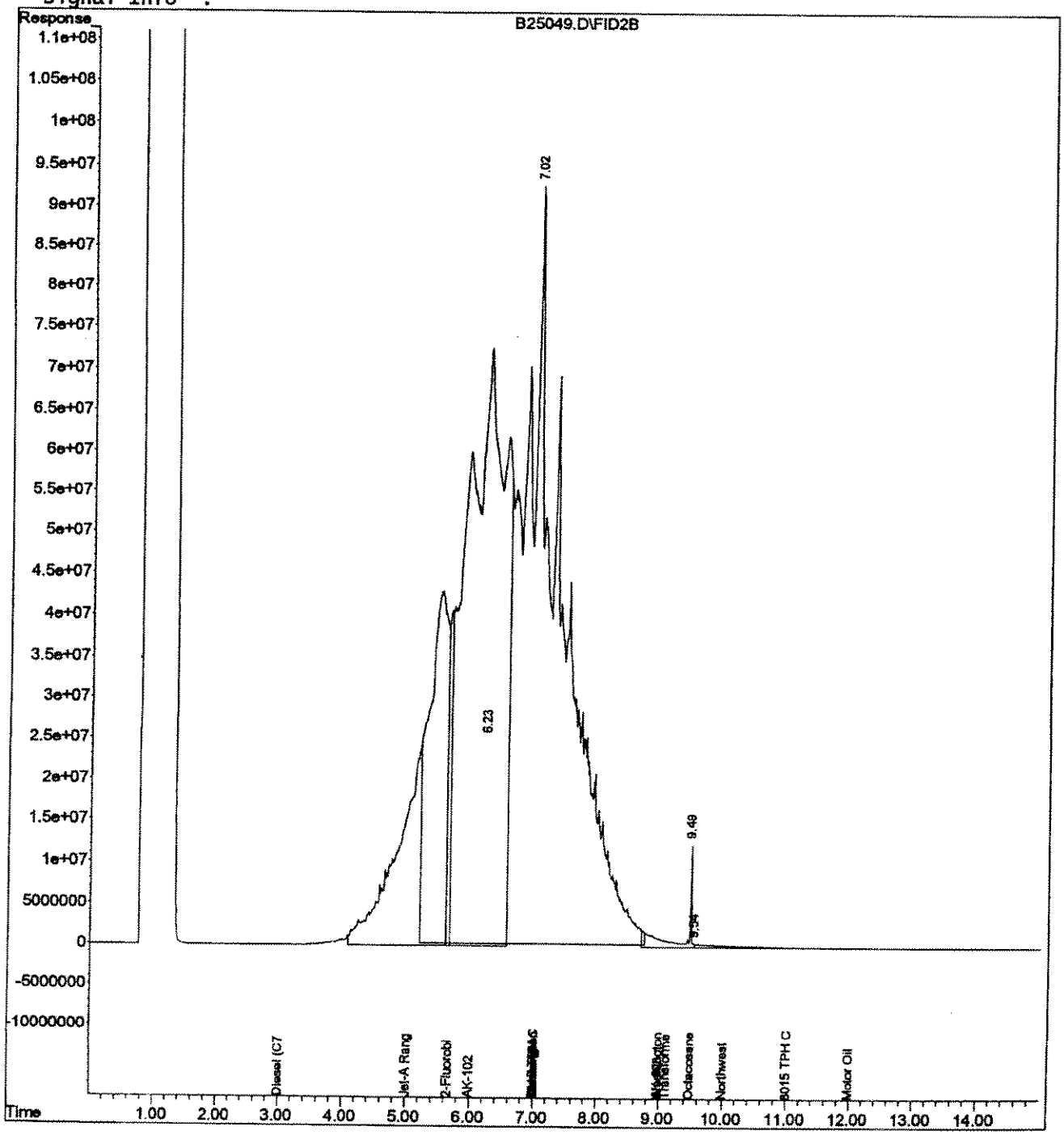


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25049.D Vial: 29
Acq On : 25 Feb 2005 18:34 Operator: GSM
Sample : b5b0435-20 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 18:50 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

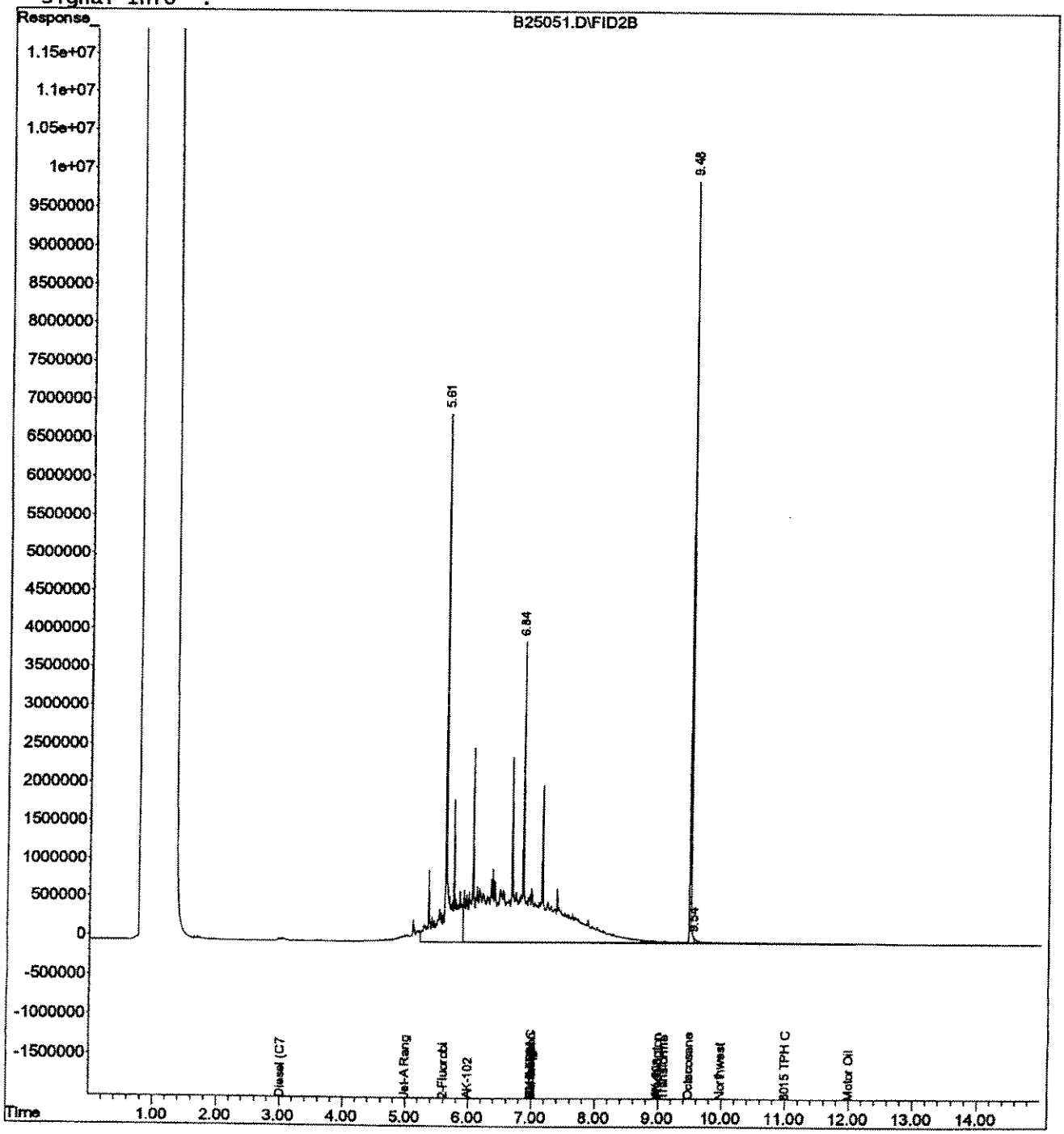


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25051.D Vial: 30
Acq On : 25 Feb 2005 18:57 Operator: GSM
Sample : b5b0435-21 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 19:13 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

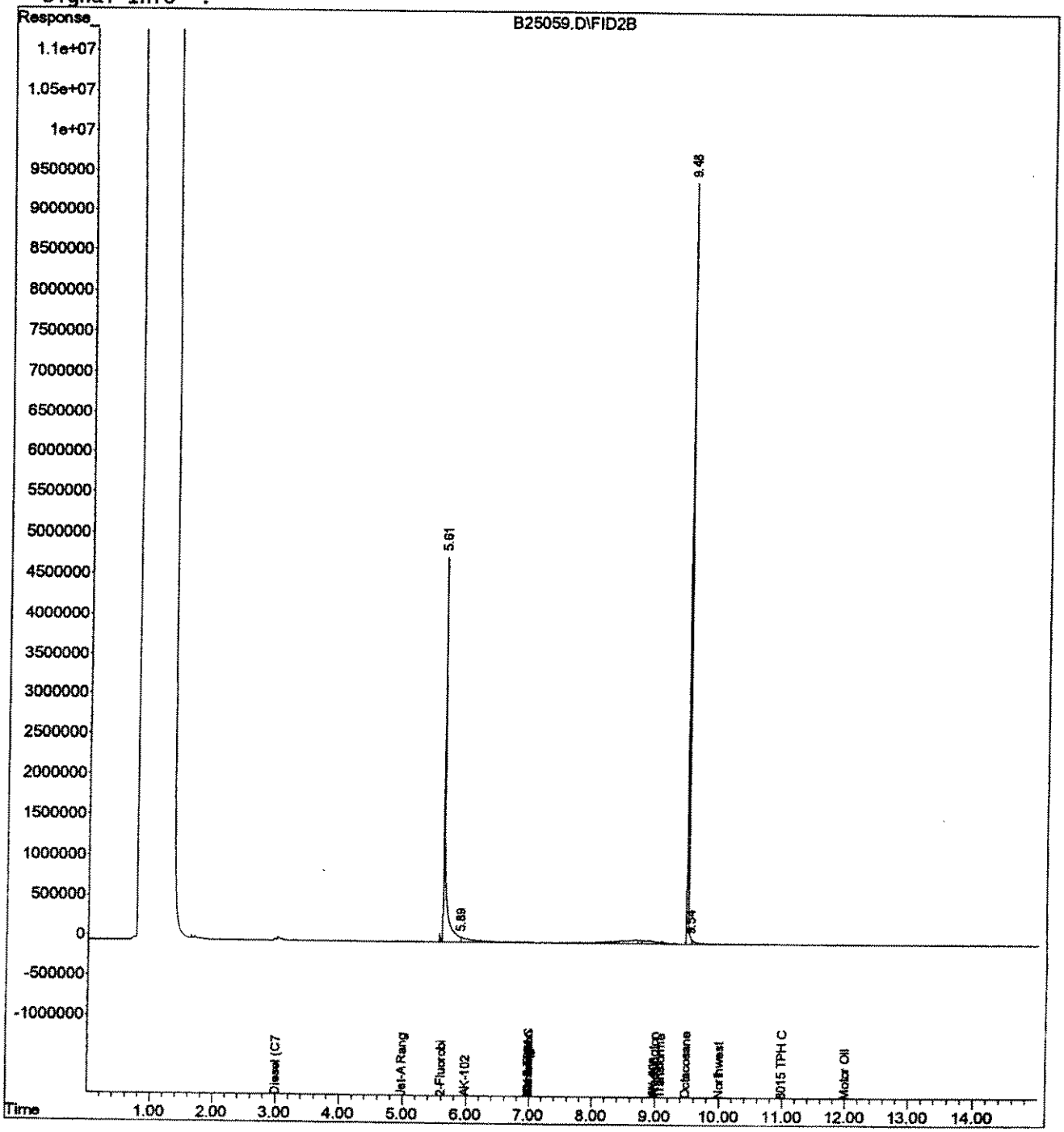


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25059.D Vial: 31
Acq On : 25 Feb 2005 20:30 Operator: GSM
Sample : b5b0435-22 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 20:46 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

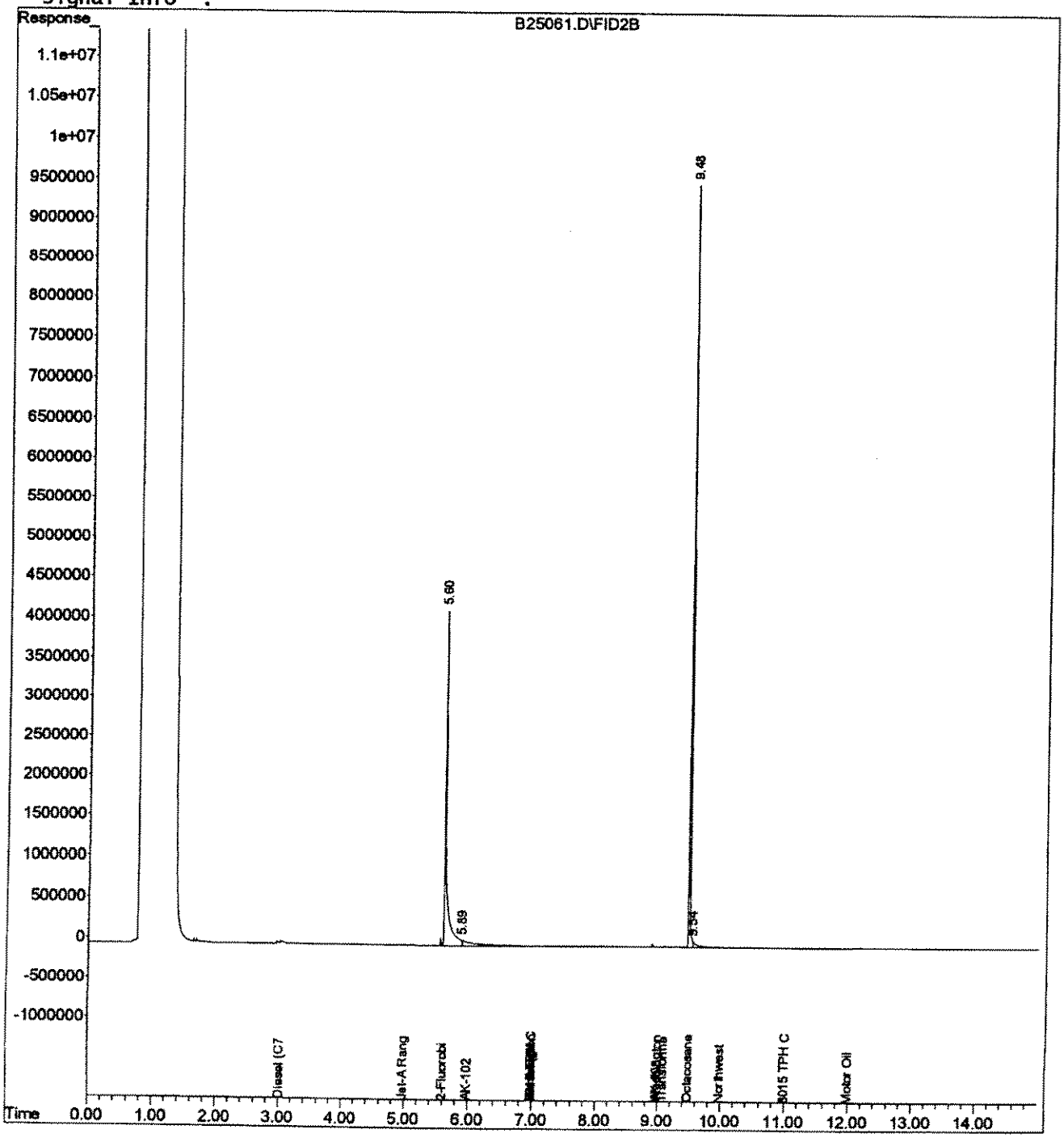


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25061.D Vial: 32
Acq On : 25 Feb 2005 20:53 Operator: GSM
Sample : b5b0435-23 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 21:09 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

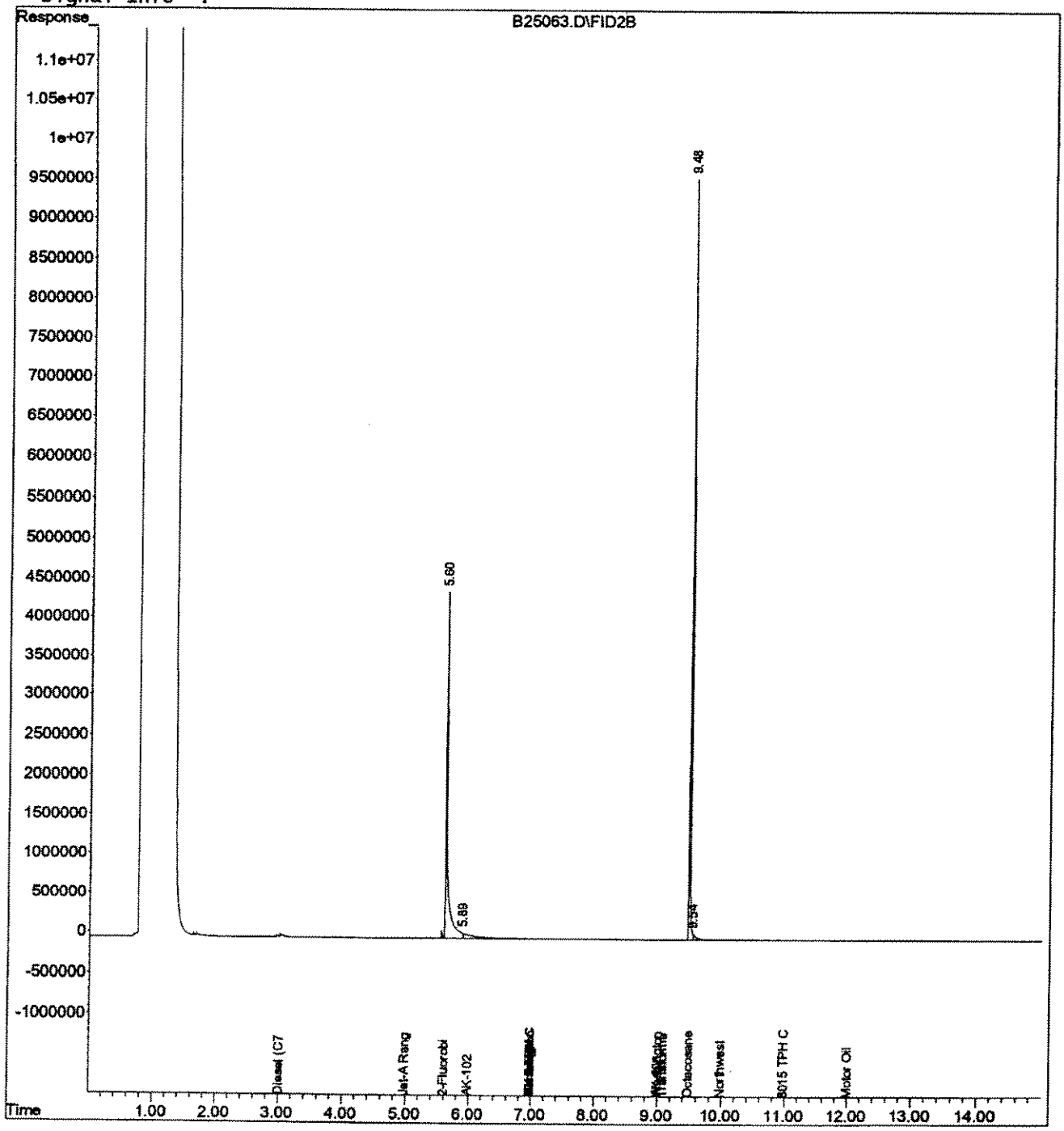


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25063.D Vial: 33
Acq On : 25 Feb 2005 21:16 Operator: GSM
Sample : b5b0435-24 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 21:32 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

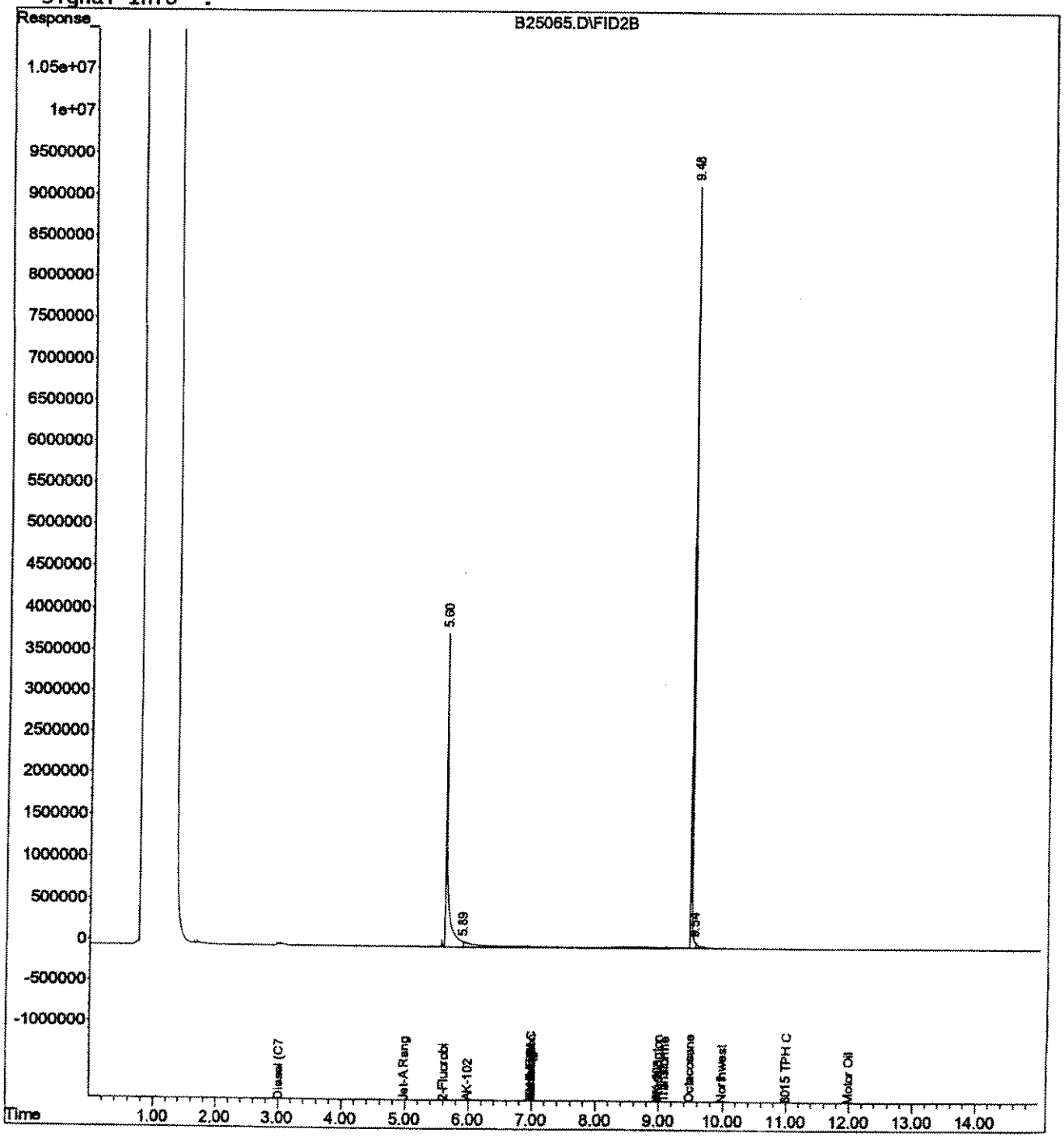


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25065.D Vial: 34
Acq On : 25 Feb 2005 21:39 Operator: GSM
Sample : b5b0435-25 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 21:55 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :

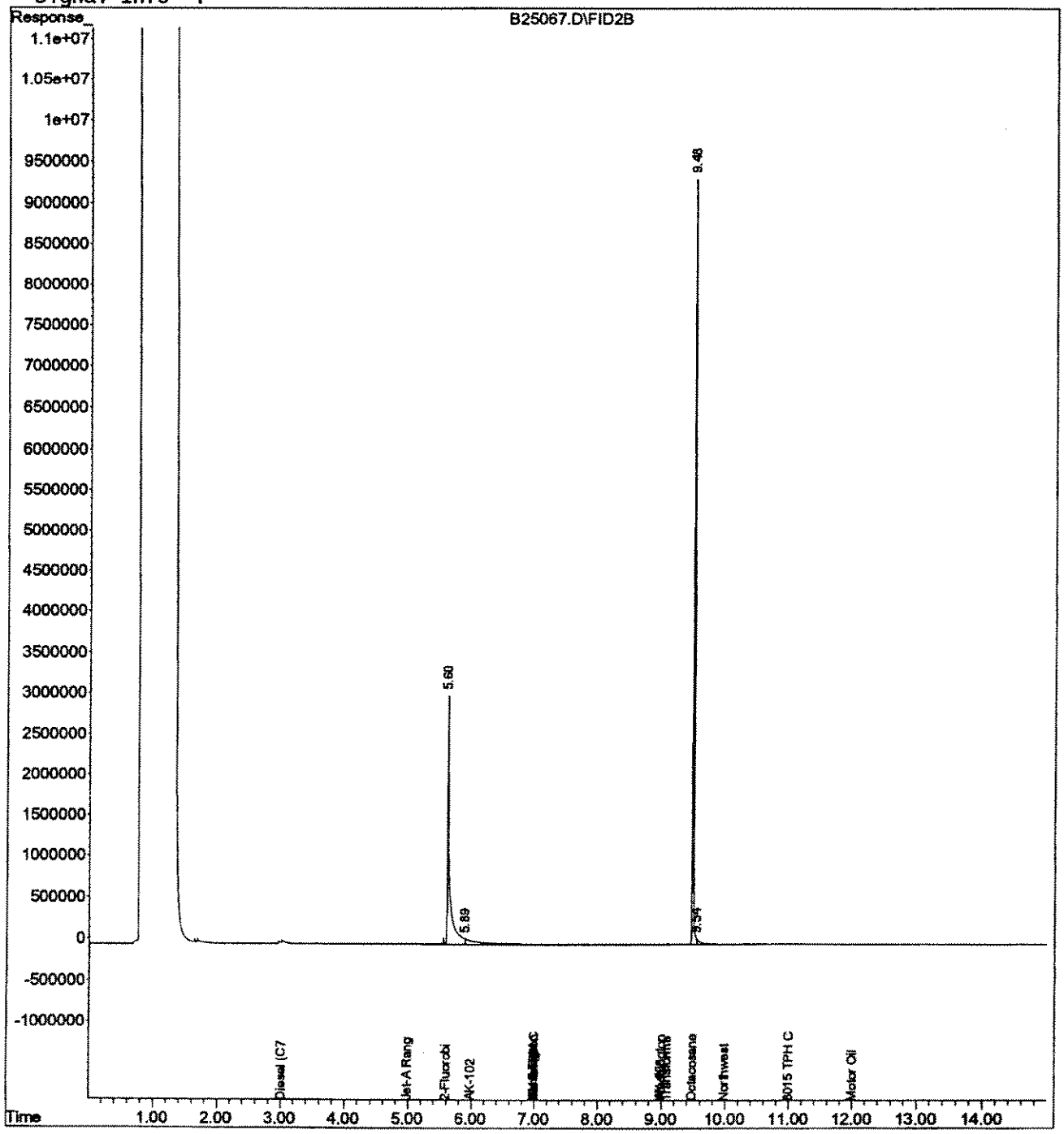


Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25067.D Vial: 35
Acq On : 25 Feb 2005 22:02 Operator: GSM
Sample : b5b0435-26 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 22:18 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25069.D Vial: 36
Acq On : 25 Feb 2005 22:25 Operator: GSM
Sample : b5b0435-27 Inst : GC #9
Misc : 1x nwdx sg s Multiplr: 1.00
IntFile : SURR.E
Quant Time: Feb 25 22:40 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)
Title : TPH-D Rear
Last Update : Mon Feb 14 20:05:01 2005
Response via : Multiple Level Calibration
DataAcq Meth : TFB0305.M

Volume Inj. :
Signal Phase :
Signal Info :